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Oceanic Observations of the Pacific

OCEANIC OBSERVATIONS OF THE PACIFIC

1950

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OCEANIC OBSERVATIONS OF THE PACIFIC: 1950

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Preface

"Oceanic Observations of the Pacific" is a medium for publication of oceanographic data collected in the Pacific Ocean and its adjacent seas by the cooperating agencies. At the present time these agencies are Scripps Institution of Oceanography of the University of California, La Jolla, California; Department of Oceanography of the University of Washington, Seattle, Washington; United States Navy Electronics Laboratory, San Diego, California; Pacific Oceanic Fishery Investigations, United States Fish and Wildlife Service (now Biological Laboratory of the Bureau of Commercial Fisheries), Honolulu, Territory of Hawaii; Pacific Oceanographic Group of the Fisheries Research Board of Canada, Nanaimo, British Columbia; South Pacific Fishery Investigations, United States Fish and Wildlife Service (now Biological Laboratory of the Bureau of Commercial Fisheries), La Jolla, California. It is hoped that other agencies engaged in oceanographic studies in the Pacific area will utilize this serial for the publication of data.

The present volume contains observations made in 1950. For each oceanographic station, values of temperature, salinity, oxygen, phosphate, or other measured concentrations are tabulated at observed and at standard depths. Computed values of density, specific volume anomaly and geopotential anomaly are also tabulated at standard depths. The numbers of bathythermograph observations made during the period 1941 to 1950, and those made in 1950, are shown by five-degree squares. The positions of serial observations are shown on appropriate charts, and information concerning cruises on which observations were made is summarized in a table.

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Description of Observations

SIGNIFICANCE OF REPORTED OCEANOGRAPHIC DATA

Routine field measurements of oceanographic parameters are usually subject to at least the following random errors:

temperature	±0.02°C
salinity	±0.03‰
depth	±5 m (in the upper 1000 m)
oxygen	±0.04 ml/L
phosphate	±0.05 - 0.1 μg at/L

Interpolated values at standard depths are known with somewhat less precision, and the resulting uncertainty in specific volume anomaly at standard depths due to random errors in field measurements of temperature, salinity and depth is of the order of four cl/ton. Therefore in this publication series it will be the practice in the future to report specific volume anomaly to no more than one part in 10^5 (one cl/ton) and geopotential anomaly to no more than the nearest dynamic centimeter. In this volume some data are reported to more figures; it must be remembered that these additional figures are not significant.

It should be noted also that computations of salinity (from measured chlorinity) and density (sigma-t, specific volume anomaly) reported in this volume have all been based on the empirical equations and tables of Knudsen (1901) and Ekman (1908). Because of the inadequacy of our present knowledge of the equation of state of sea water (Eckart, 1958) and the uncertainty of the relationship between chlorinity and salinity (Carritt and Carpenter, 1959), it is possible that these computed values differ systematically from the absolute values. However, in the upper thousand meters at least, Reid (1959) has shown that the influence of such systematic errors on the accuracy of computed geostrophic flow is significantly smaller than that of errors in the determination of salinity, temperature, pressure and position.

SUMMARY CRUISE INFORMATION

The positions of oceanographic stations are shown in Charts 2 through 15, and information concerning cruises on which these observations were made is summarized on page x. Unless otherwise noted, temperatures were measured with paired protected reversing thermometers at each depth. Depths were measured with unprotected reversing thermometers on most sample bottles below 100 meters, and accepted depths were determined by use of an L-Z curve (Pollak, 1950) as described by LaFond (1951). Water samples were analyzed ashore for salinity by the Knudsen method and aboard ship for dissolved oxygen by the Winkler method (Jacobsen, Robinson and Thompson, 1950), and for inorganic phosphorus by the method of Wooster and Rakestraw (1951). The methods used in the processing of data and in the computation of density, specific volume anomaly and geopotential anomaly differ in no significant way from those described by LaFond (1951).

Chart 16 lists the number of bathythermograph observations in the North and South Pacific collected during the year 1950. Charts 17, 18 and 19 contain the total number of bathythermograph observations taken in the North and South Pacific, Indian and Antarctic Oceans through 1950. Copies of all bathythermograph observations shown on these charts are on file both at the Scripps Institution of Oceanography and the U. S. Navy Hydrographic Office, Washington, D. C.

Agencies collecting bathythermograph data are urged to send them for processing to the Hydrographic Office which will return photographic copies of the slides, if desired. The Scripps Institution and the Hydrographic Office exchange copies of all such data from the Pacific processed by each agency, thus insuring complete collections at both locations.

SUMMARY CRUISE INFORMATION

Cruise	Vessel	Dates	Number of Stations				Number of BT Observations	Surface Temperature Underway	Number of Stations		Plankton Tows	Other Measurements
			0-500 m	500-1000 m	1000-2000 m	TOTAL			O_2	PO_4-P		
CCOFI												
5001	Crest	5-8 i	1	3	14	18	60	irregular intervals	17	15		11 anchor stations
	Horizon	6-8 i	1		14	15	26	irregular intervals	15	15		10 anchor stations
5002	Black Douglas	3-19 ii		7	29	36	108	irregular intervals	32		29a; 2b	
	Crest	2-14 ii	3	14	24	41	123	irregular intervals	40	41	40a	
	Horizon	31 i-13 ii	4	6	29	39	89	irregular intervals	39	38	39a	
5003	Black Douglas	2-14 iii		5	35	40	125	irregular intervals	40		37a; 3b	
	Crest	2-7 iii		4	9	13	79	irregular intervals	13	13	10a; 2b	
	Horizon	2-15 iii	2	6	34	42	128	irregular intervals	42	42	40a; 3b	
	Paolina-T	10-18 iii		7	7	14		irregular intervals	13	13	14a	
5004	Black Douglas	4-17 iv		5	36	41	108	irregular intervals	40		37a; 4b	
	Crest	4-17 iv	3	5	35	43	127	irregular intervals	43	43	41a; 2b	
	Horizon	4-15 iv	4	13	20	37	98	irregular intervals	37	36	40a; 1b	
5005	Black Douglas	3-18 v		9	32	41	58	irregular intervals	41		37a; 3b	
	Crest	3-16 v	3	4	36	43	123	irregular intervals	42	43	41a; 2b	
	Horizon	3-16 v	4	11	30	45	118	irregular intervals	45	45	46a	
5006	Black Douglas	6-21 vi	5	3	33	41	98	irregular intervals	40		40a	
	Crest	8-21 vi	2	10	36	48	155	irregular intervals	48		46a	
	Paolina-T	12-23 vi	6	1	9	16	19	irregular intervals	16	15	19a	
5007	Black Douglas	7-24 vii	3	5	39	47	119	irregular intervals	47	47	47a	
	Crest	8-21 vii	4	11	35	50	162	irregular intervals	50	50	50a	
	Paolina-T	6-20 vii	2	5	35	42	42	irregular intervals	41	42	43a	
5008	Black Douglas	5-19 viii	6	6	34	46	123	irregular intervals	46		46a	
	Crest	9-19 viii	4	9	29	42	123	2-hourly, occasionally hourly or less	42	42	42a	
	Paolina-T	9-13 viii	5		3	8	55	hourly or less	7	7	5a	3 drogue stations

5009	Black Douglas	6-20 ix	4	5	37	46	123	irregular intervals	46		45a	
	Crest	7-19 ix	1	3	32	41c	192	3-hourly, hourly or less	41	41	41a	
	Paolina-T	7-22 ix	6	3	34	43	72	irregular intervals	41		42a	
5010	Black Douglas	11-20 x	48	6	13	67	353	hourly or less	67			64 anchor stations
	Crest	11-20 x	48	1	19	67	392	hourly or less	67			64 anchor stations
	E. W. Scripps	12-18 x	39	1	12	52	174	hourly or less	52			53 anchor stations
5011	Black Douglas	17-28 xi	4	2	38	44	180	irregular intervals	44	44		
	Crest	9-21 xi	8	5	30	43	164	irregular intervals	43	43		43 surface current measurements by GEK
	E. W. Scripps	11-17 xi	24	1	15	40	145	irregular intervals				35 anchor stations; 5 drogue stations
	Paolina-T	10-18 xi	10	1	2	13	21	irregular intervals				
POFI												
HMS-2	Hugh M. Smith	26 i-2 iii		3	46	50	553	continuous record	49	49	49f	
HMS-5	Hugh M. Smith	30 v-6 viii			44	53d	502	continuous record	51	43	51f	
POG												
C-1	Cedarwood	28 vii-26 viii	28	9	51	88	175	at BT station and midway between hydrographic stations	88			
C-2	Cedarwood	16-22 ix	8	6	7	21	41	at BT station and midway between hydrographic stations	21			
WSJ-3	Wm. J. Stewart	2-6 x	12	1	5	18	35	at BT station and midway between hydrographic stations	18			
SIO/USNEL/UW												
	Burton Island	5-30 viii	46	5	10	72e	127			16	43g	33 gravity cores; 6 dredge hauls

a Plankton tow taken obliquely from a depth of about 70 m to the surface with a 30xxx net 1.0 m in diameter at the mouth by approximately 5 m in over-all length.

b Deep plankton tow taken obliquely from a depth of 400-700 m to the surface (600 or 1000 m of wire out).

c Four observations from 2000 to 3000 and two from 3000 to 4000 are included.

d Two observations from 2000 to 3000 and five from 3000 to 4000 are included.

e Eleven observations from 2000 to 3000 are included.

f Same as a, but 200-0 m.

g Vertical tows, usually 100-0 m, with a one-half-meter Nansen-type net, upper part of No. 2 bolting silk and lower part of No. 10.

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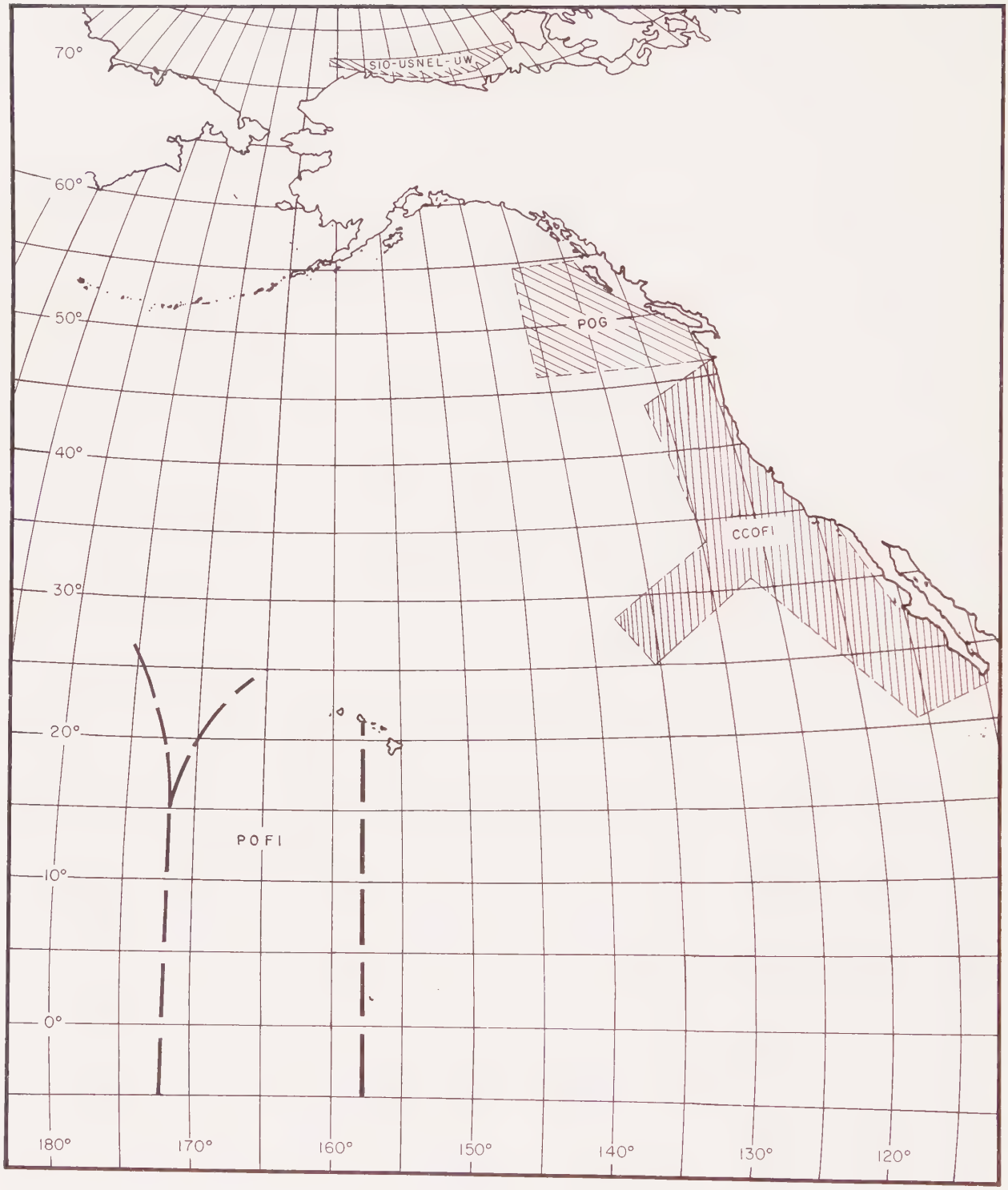

CHART 1. General location chart

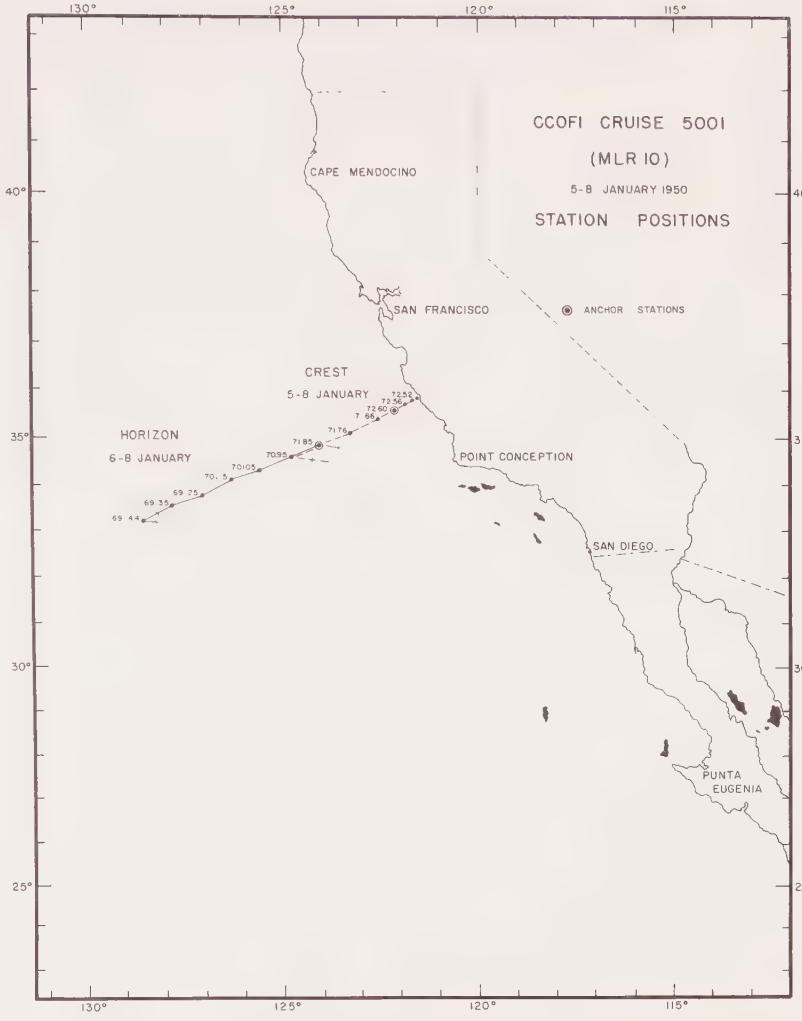

CHART 2. Station positions, California Cooperative Oceanic Fisheries Investigations, Cruise 5001

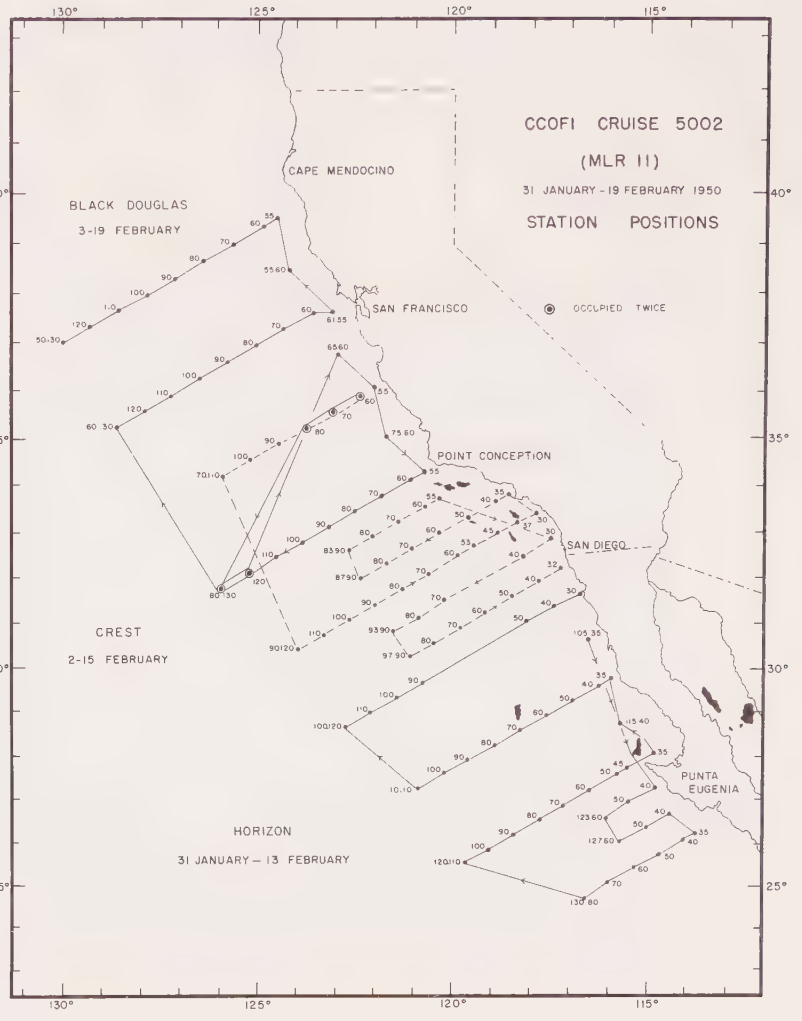

CHART 3. Station positions, California Cooperative Oceanic Fisheries Investigations, Cruise 5002

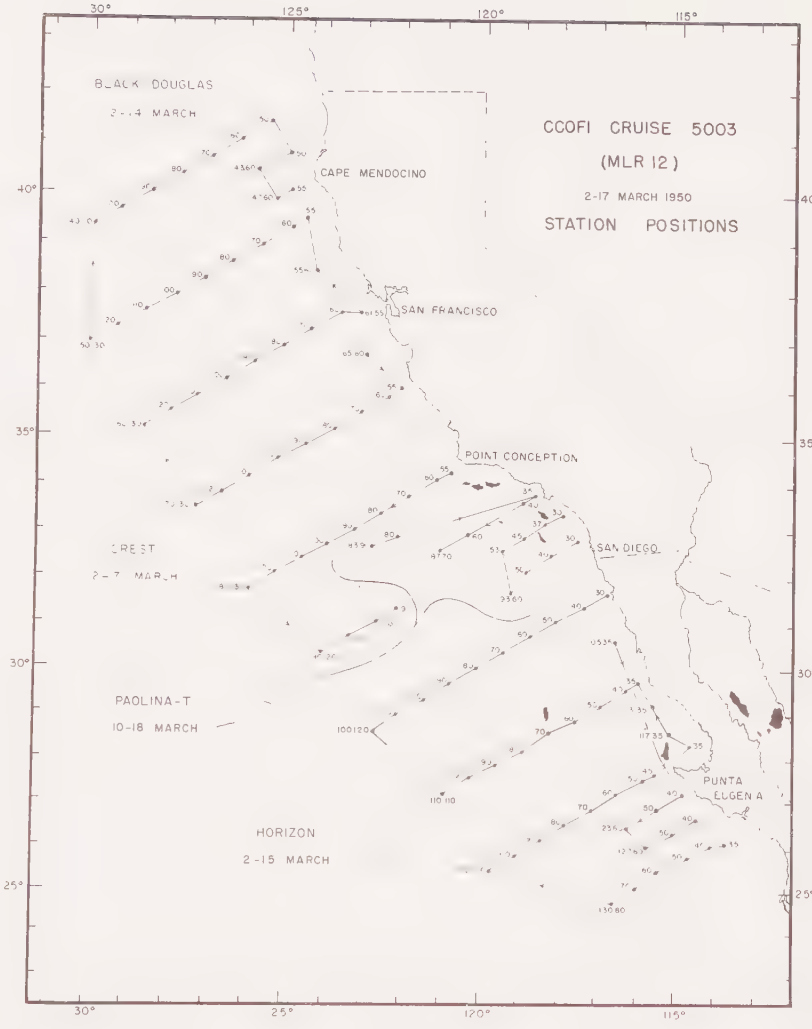

CHART 4. Station positions, California Cooperative Oceanic Fisheries Investigations, Cruise 5003

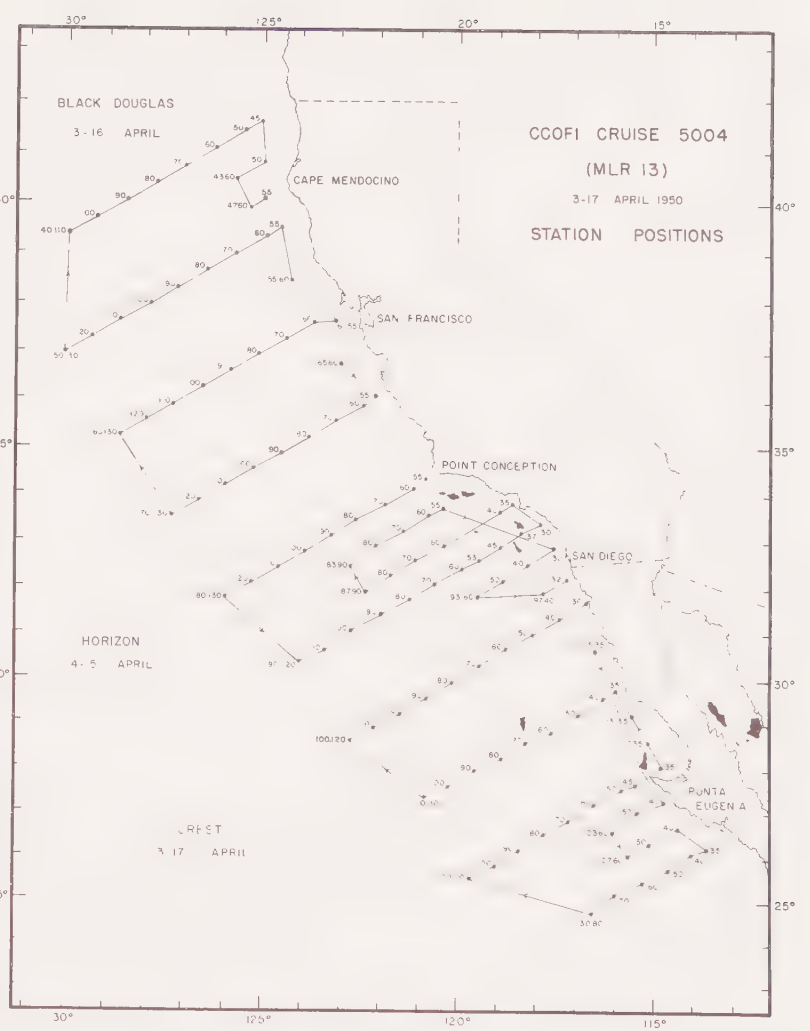

CHART 5. Station positions, California Cooperative Oceanic Fisheries Investigations, Cruise 5004

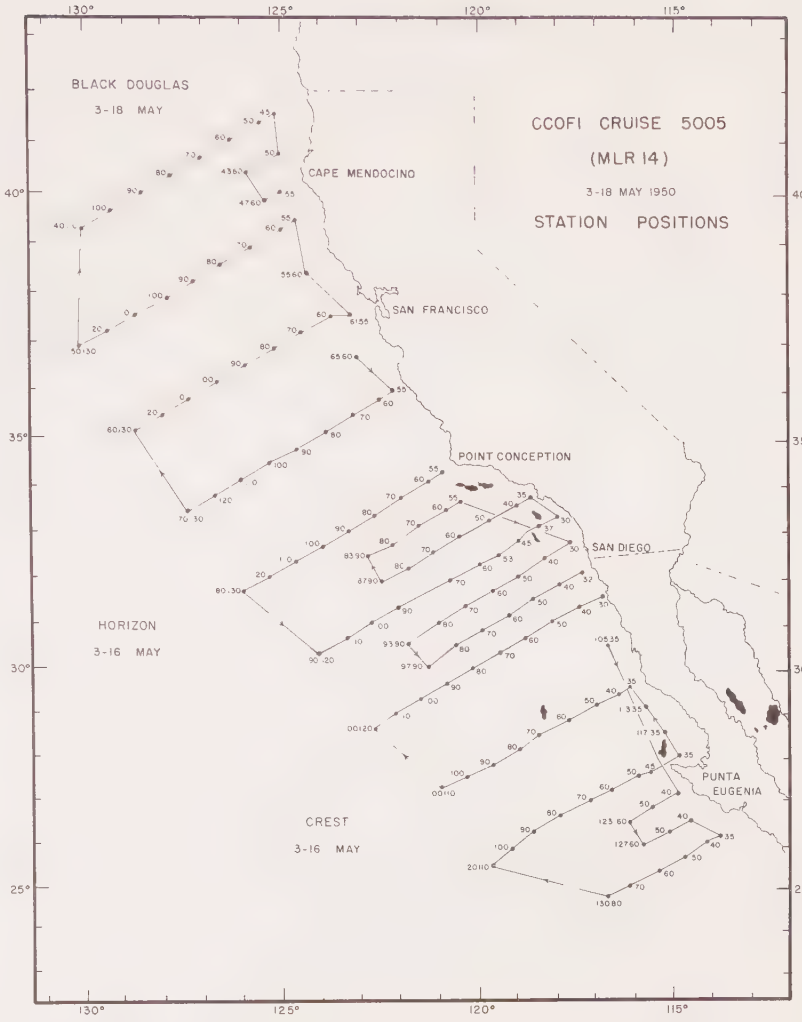

CHART 6. Station positions, California Cooperative Oceanic Fisheries Investigations, Cruise 5005

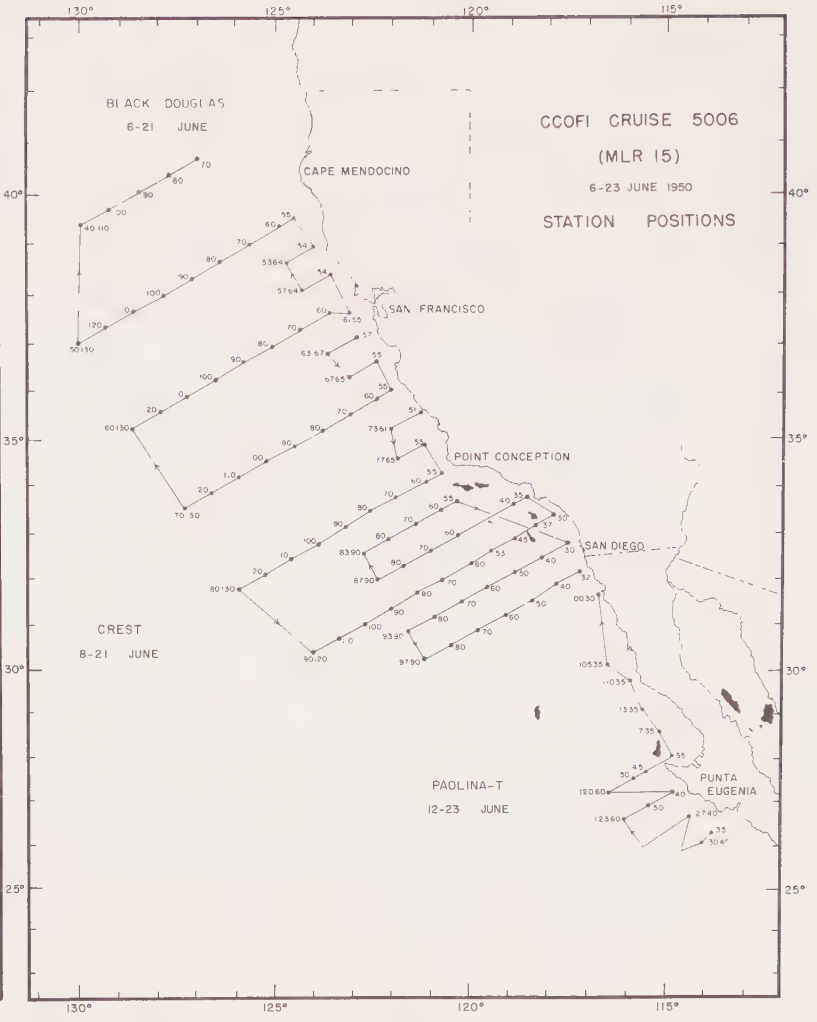

CHART 7. Station positions, California Cooperative Oceanic Fisheries Investigations, Cruise 5006

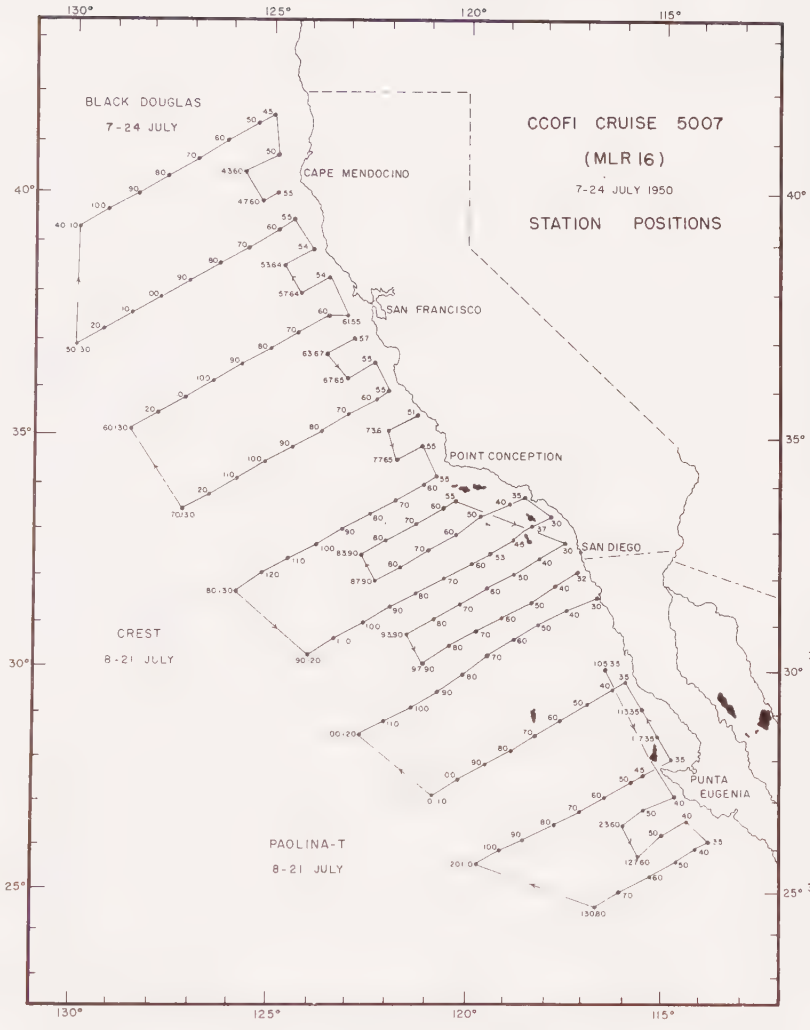

CHART 8. Station positions, California Cooperative Oceanic Fisheries Investigations, Cruise 5007

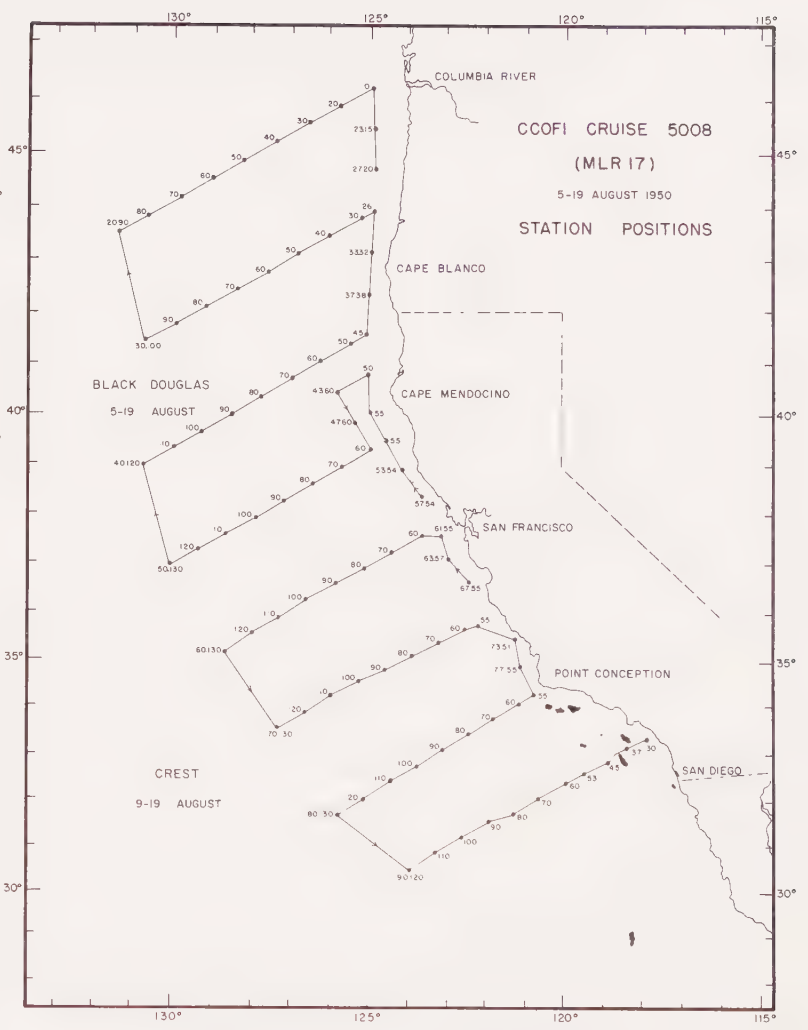

CHART 9. Station positions, California Cooperative Oceanic Fisheries Investigations, Cruise 5008

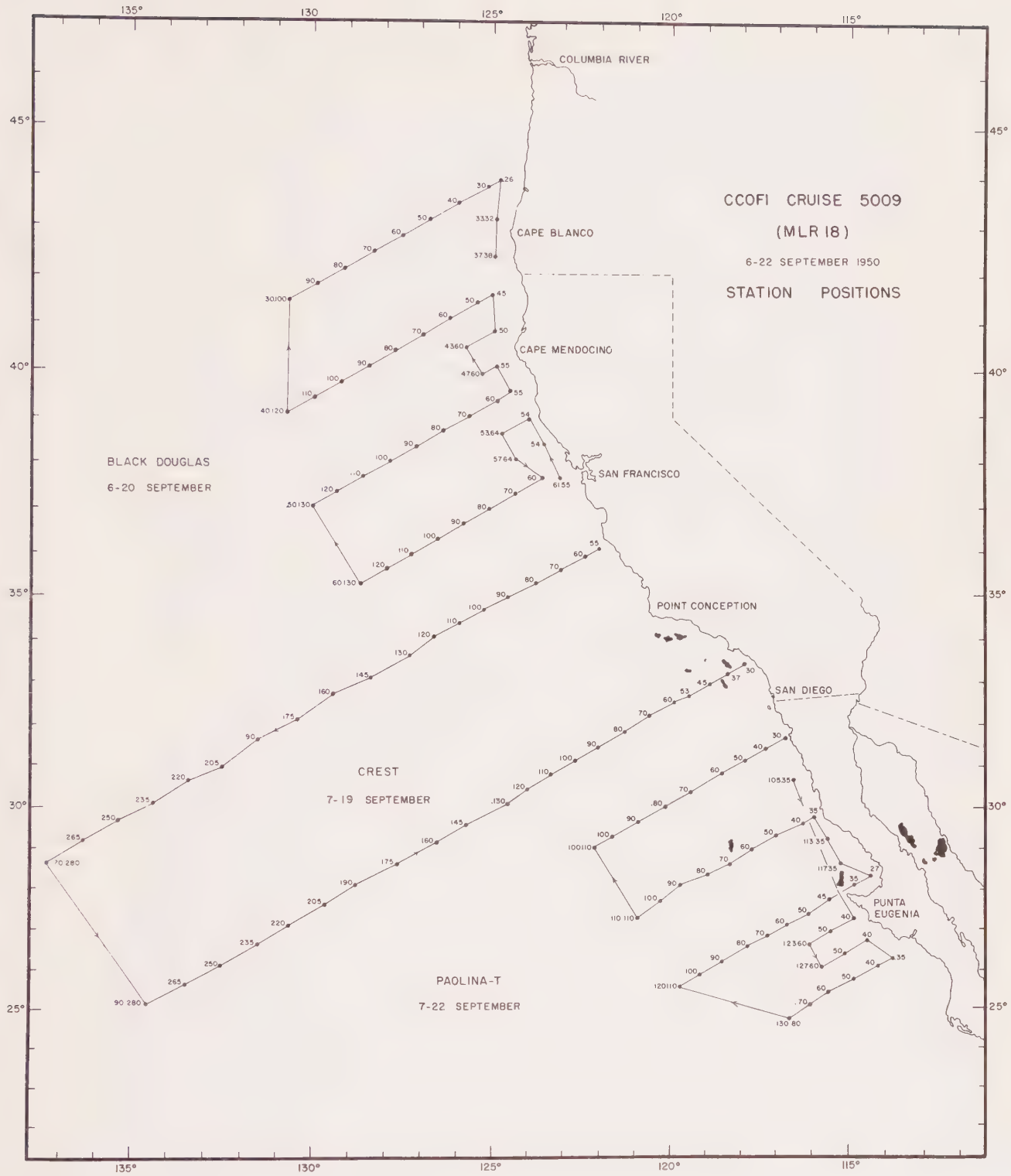

CHART 10. Station positions, California Cooperative Oceanic Fisheries Investigations, Cruise 5009

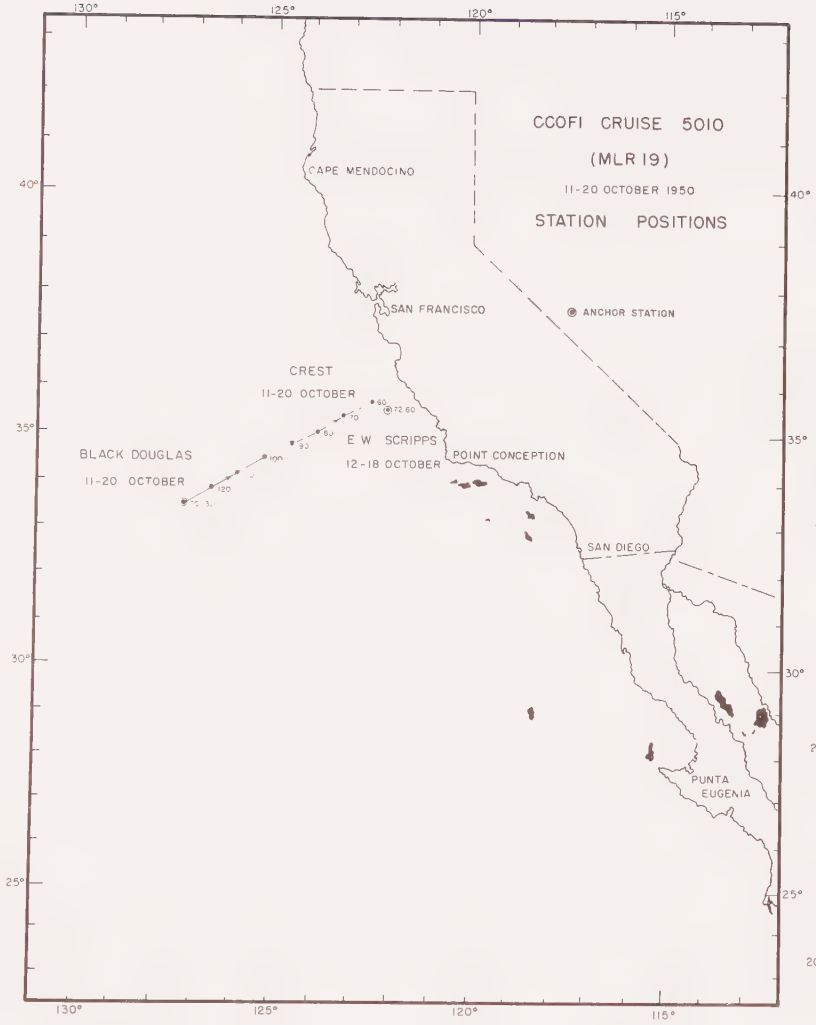

CHART 11. Station positions, California Cooperative Oceanic Fisheries Investigations, Cruise 5010

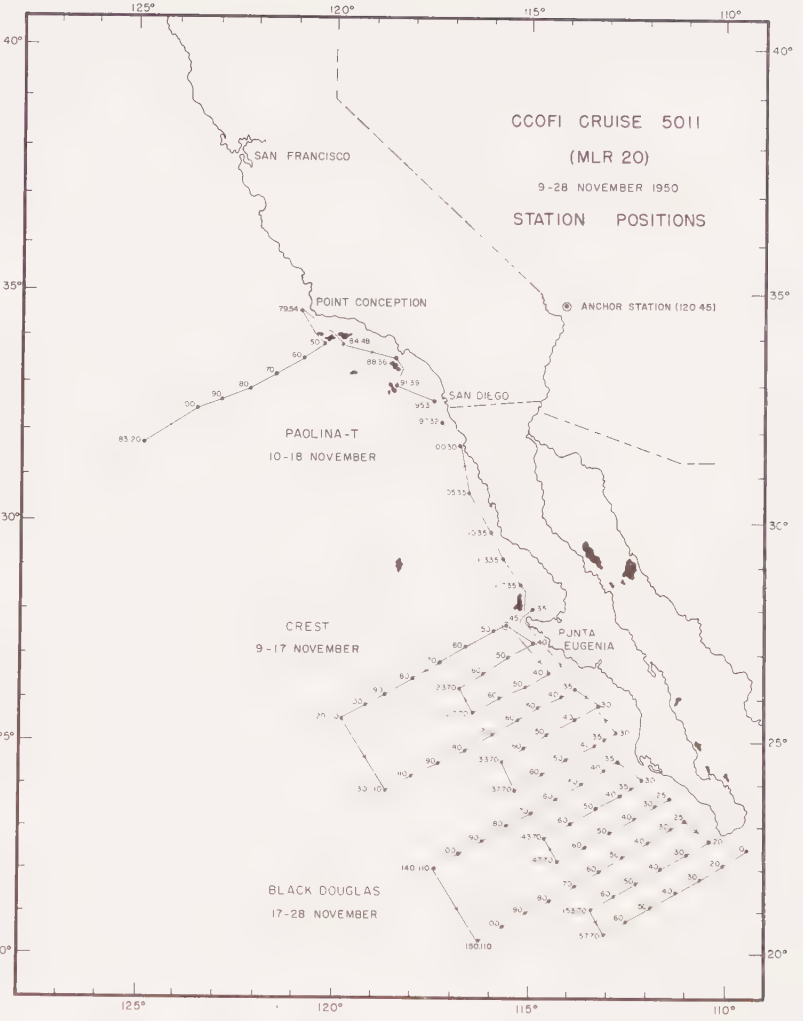

CHART 12. Station positions, California Cooperative Oceanic Fisheries Investigations, Cruise 5011

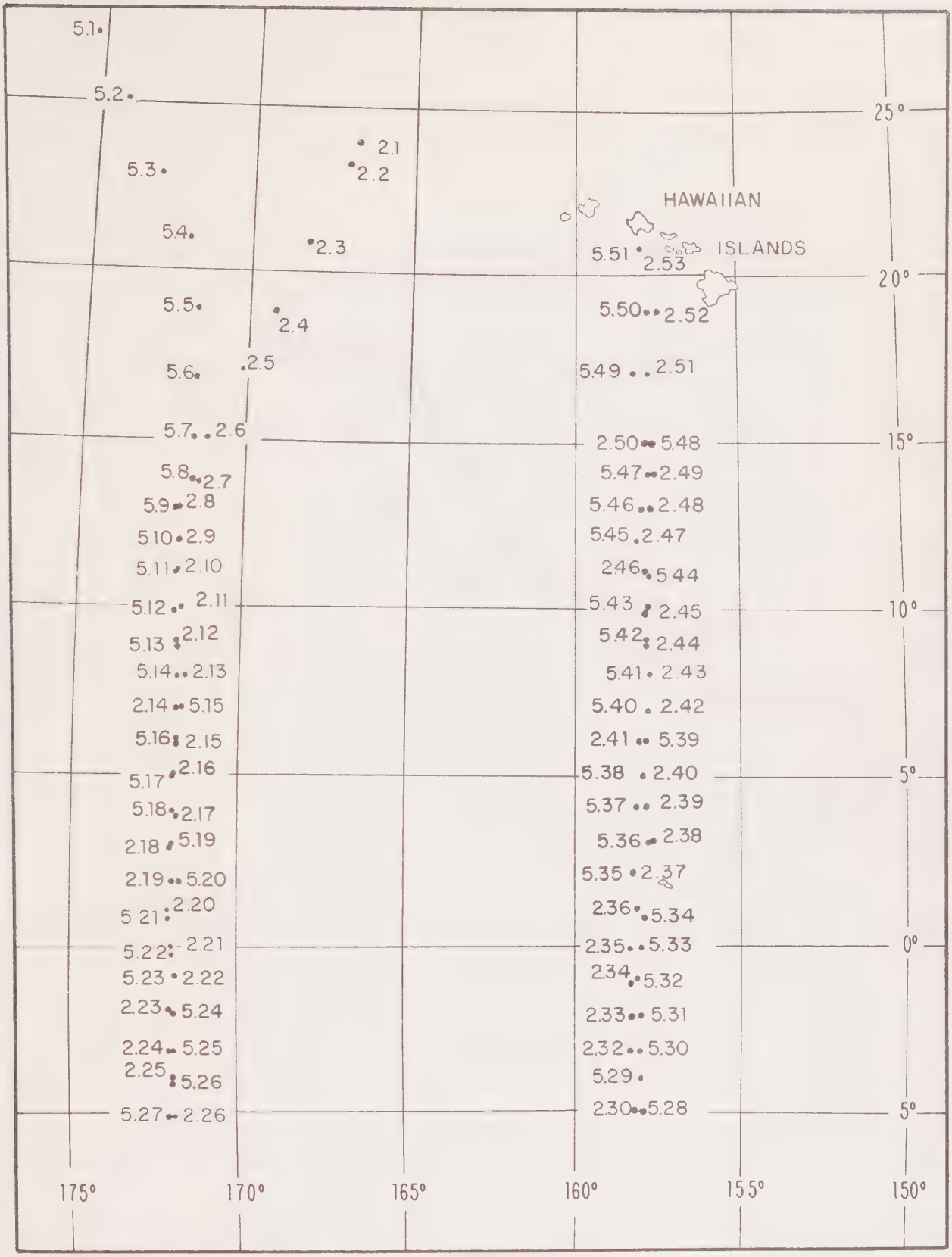

CHART 13. Station positions, Pacific Oceanic Fishery Investigations, 1950

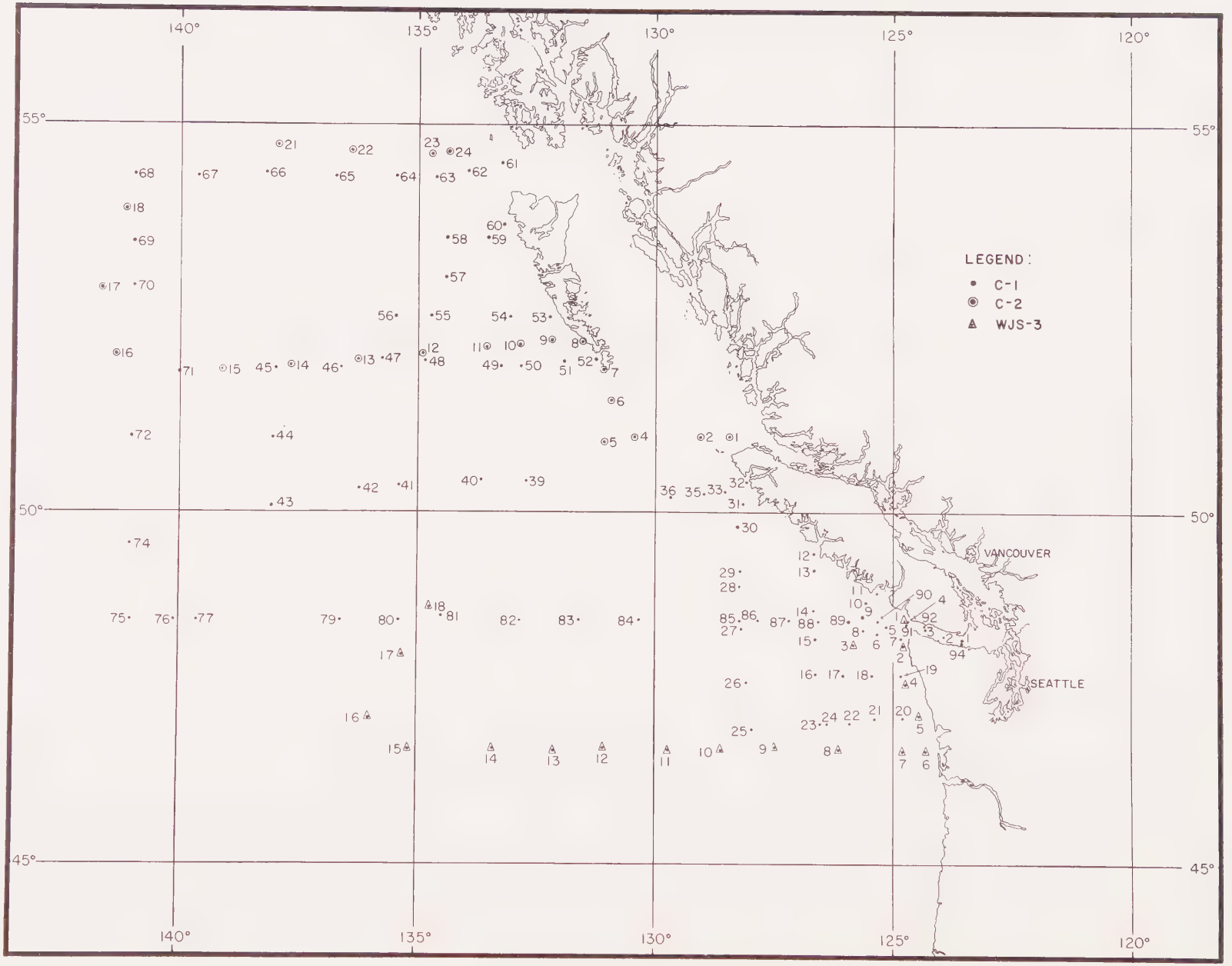

CHART 14. Station positions, Pacific Oceanographic Group, 1950

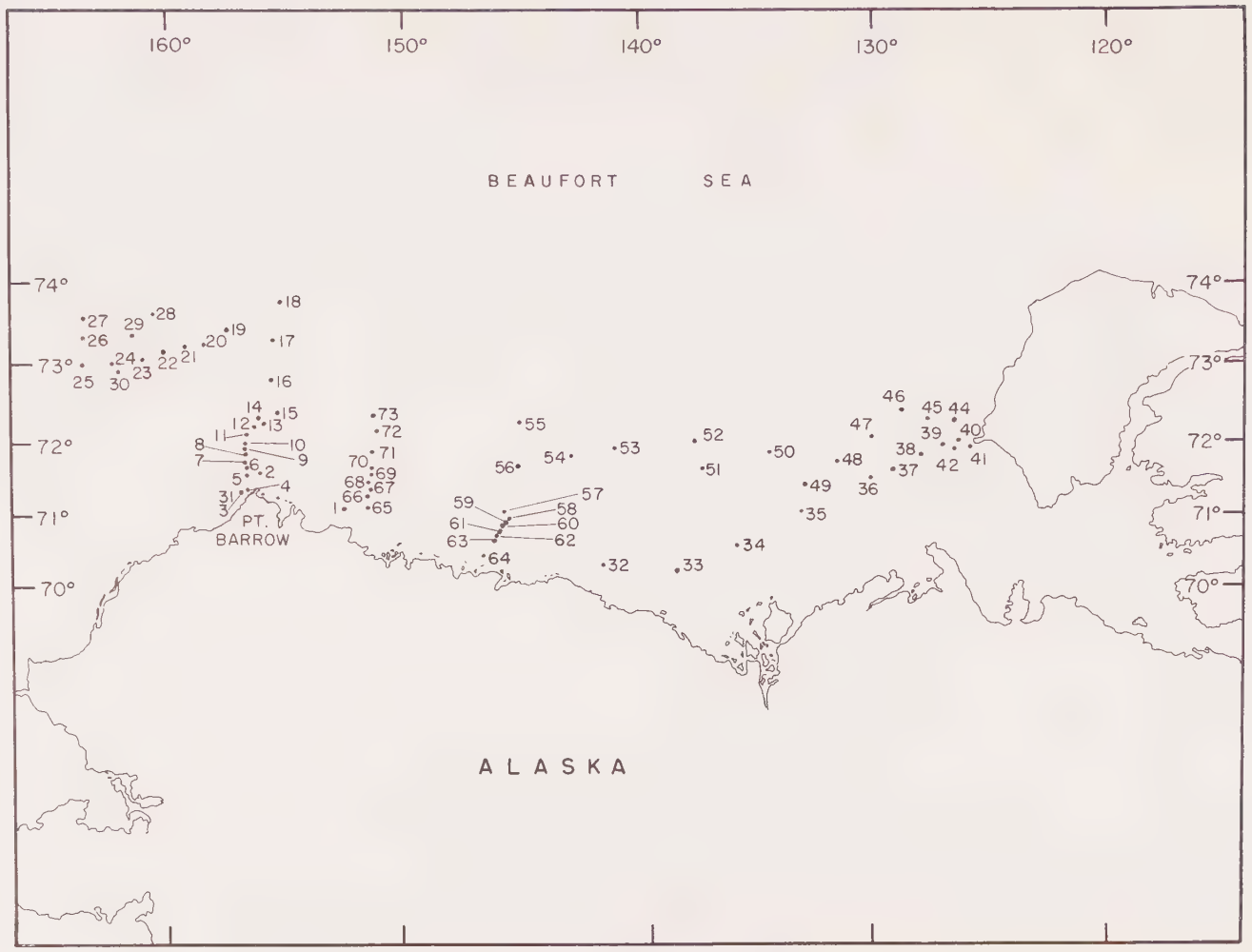

CHART 15. Station positions, Scripps Institution of Oceanography, the U. S. Navy Electronics Laboratory and the University of Washington by the USS Burton Island in the Beaufort Sea, 1950

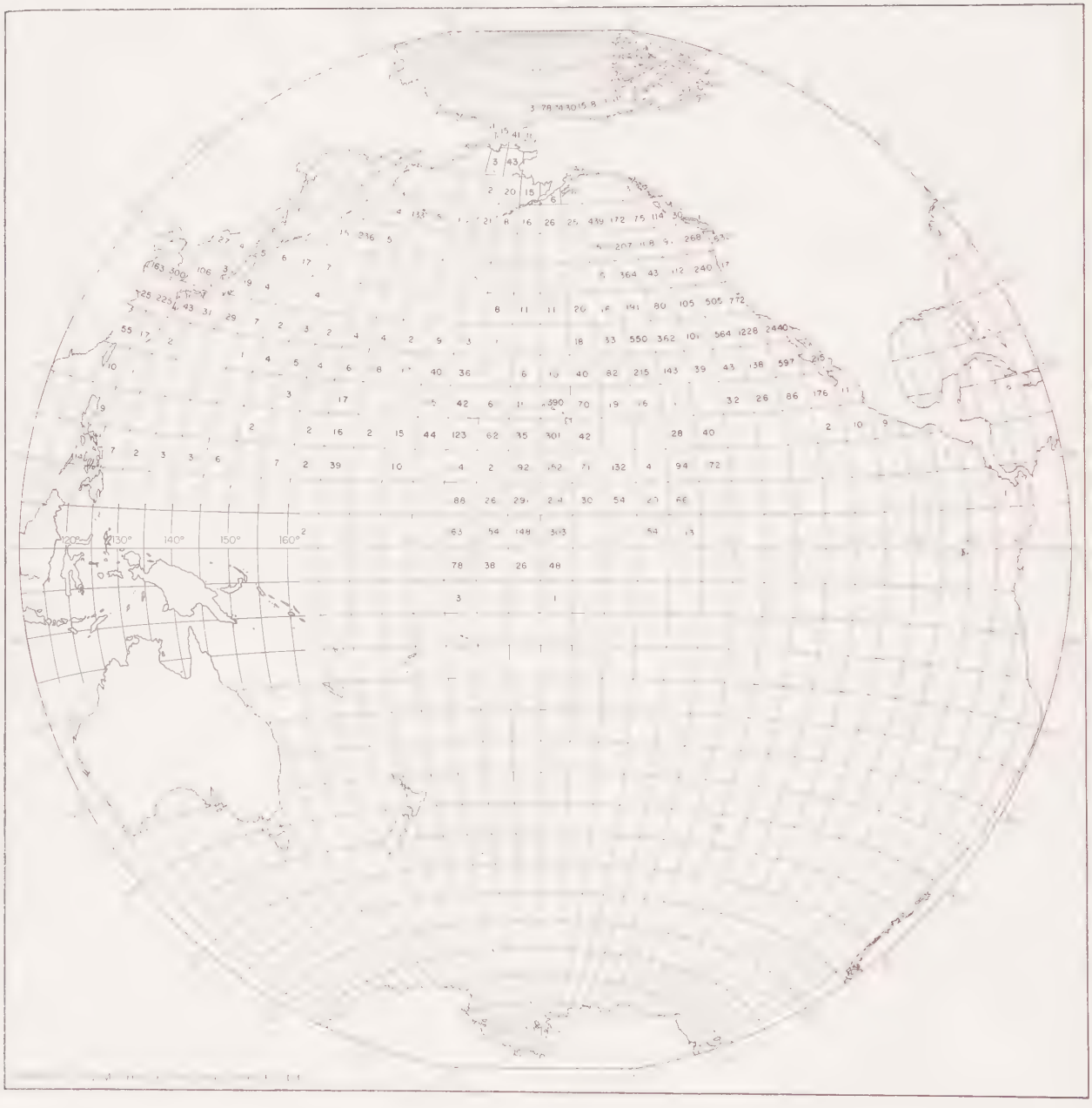

CHART 16. Bathythermograph observations, North and South Pacific, 1950; total, 18,507

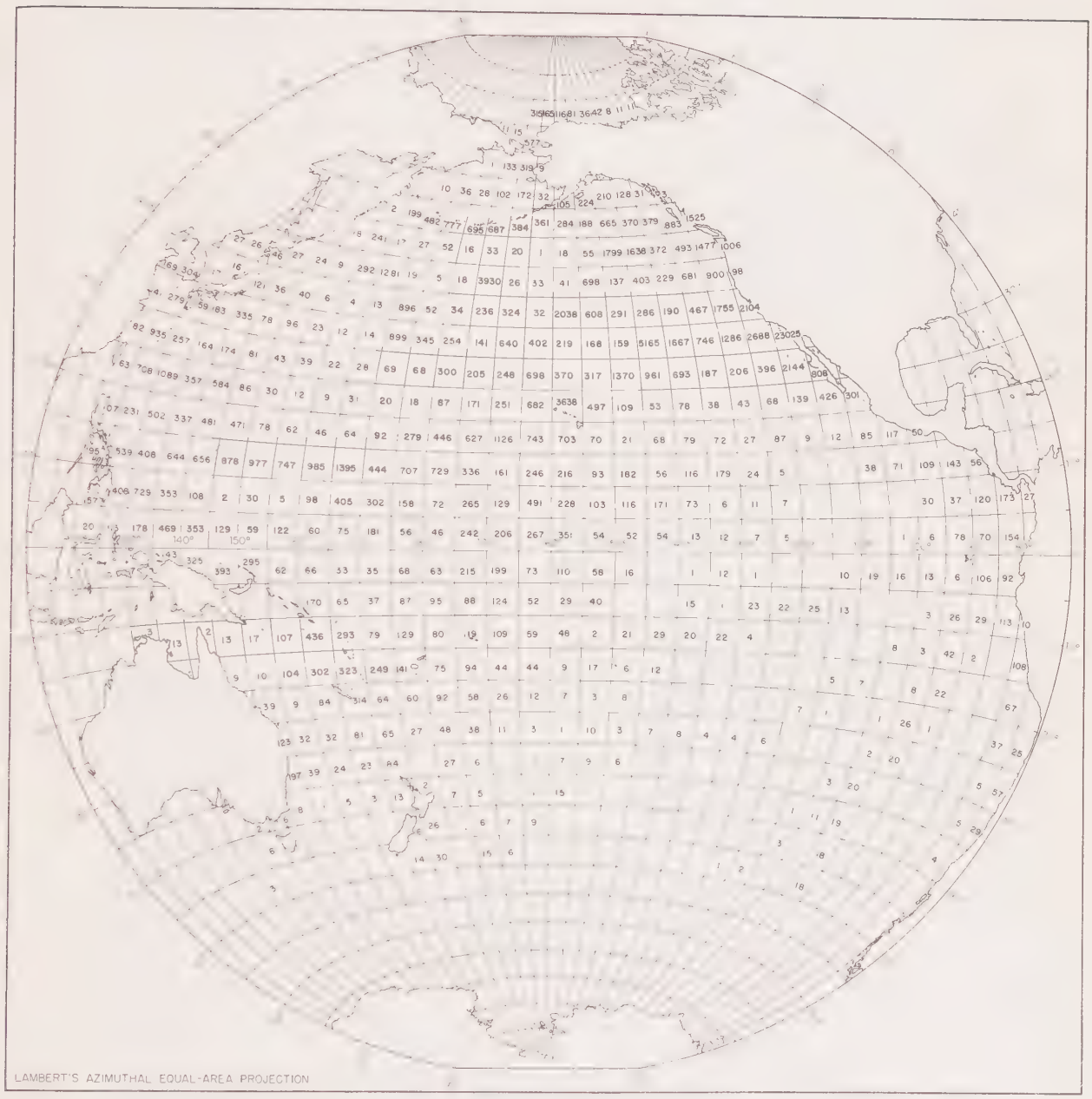

CHART 17. Bathythermograph observations, North and South Pacific, 1941 through 1950; total, 132,339

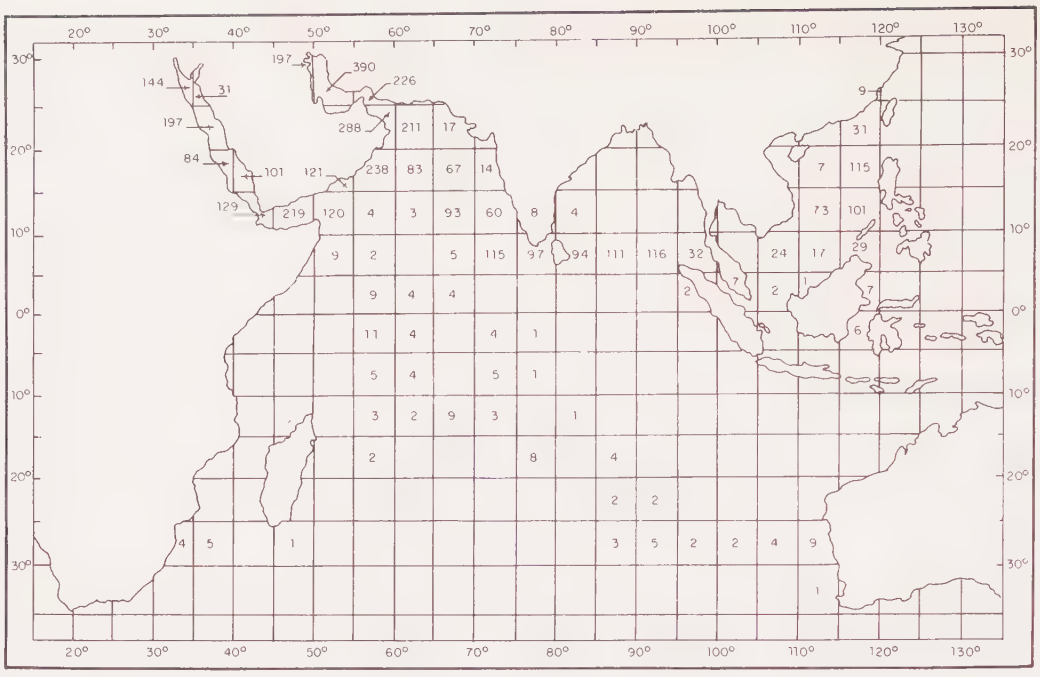

CHART 18. Bathythermograph observations, Indian Ocean, 1941 through 1950

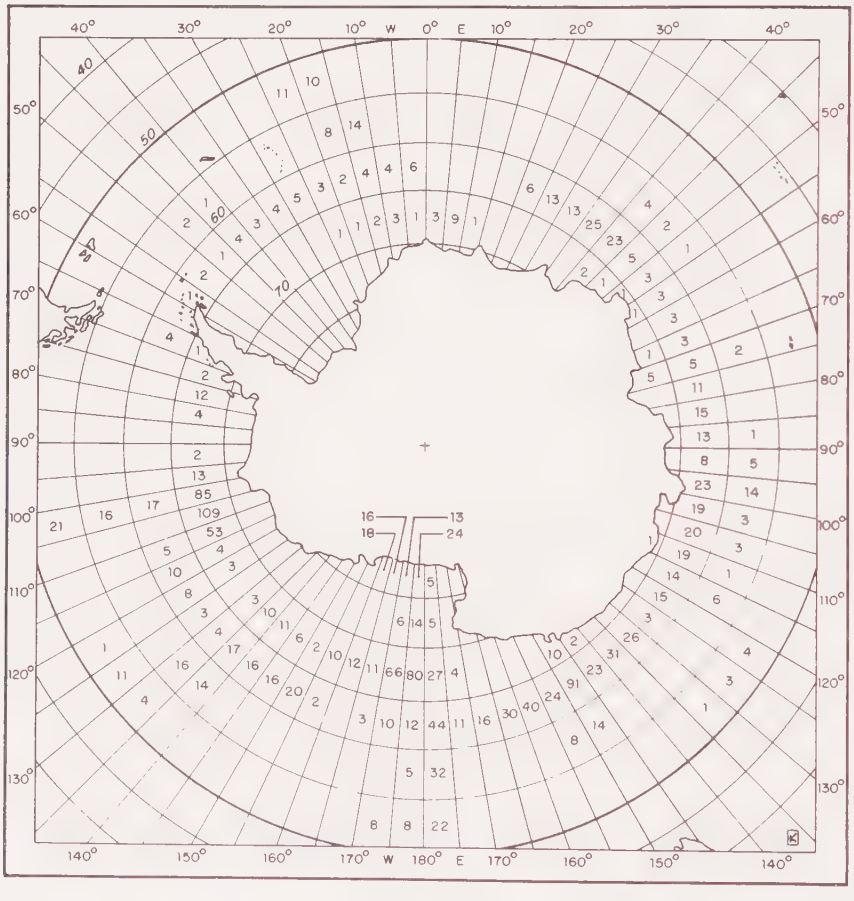

CHART 19. Bathythermograph observations, Antarctic Ocean, 1941 through 1950; chart complete for latitudes greater than 50° South

Explanation of Tables

SIDE RUNNING HEADS

Cruise-identifying information is shown in the margin near the top of the page. The first line is an abbreviation of the name of the organization responsible for the data. The second and other lines, if present, give the cruise identification. In the case of data collected on the California Cooperative Oceanic Fisheries Investigations research program, for example, CCOFI 5001 signifies the January 1950 cruise of the program.

Individual station numbers are given in the margin opposite the station data. The letter "D" preceding the number indicates a drogue station; the letter "K" inserted in the station number denotes an anchor station. Station positions are shown in the appropriate station position charts.

HEADINGS OF GROUPS OF COLUMNS

OBSERVED: Corrected data at accepted depths of observation.

INTERPOLATED: Data at standard depths, interpolated from smooth distribution curves. The standard depths are those recommended by the International Association of Physical Oceanographers in 1936 (Assoc. d'Océanographie Physique, Procès Verbaux, No. 2, p. 59, 1937).

COMPUTED: The results of computations based, in general, on interpolated values.

COLUMN HEADINGS

Z — Depth in meters at which observation was made or an interpolated value obtained.

T — Temperature of water in degrees centigrade at observed or interpolated depths.

S — Salinity of water in grams per kilogram (‰) at observed or interpolated depths.

O_2 — Concentration of dissolved oxygen in milliliters per liter (ml/L) at observed or interpolated depths.

PO_4-P — Concentration of dissolved inorganic phosphorus in microgram atoms per liter (μg at/L) or micromoles per liter at observed or interpolated depths.

σ_t — Sigma-t in grams per liter at observed or interpolated depths. Sigma-t can be defined

$$\sigma_t = 1000\ (\rho_{ST0} - 1)$$

where ρ_{ST0} is the density, in grams per cubic centimeter, of water of salinity, S, temperature, T, and at standard atmospheric pressure.

δ — Specific volume anomaly, in 10^{-5} cubic centimeters per gram (centiliters per metric ton) at interpolated depths. Specific volume anomaly is defined as the difference between the specific volume of the water at a specified depth and the specific volume of a standard water with salinity of 35‰ and temperature of 0°C at the same depth.

ΔD — Geopotential anomaly, in dynamic meters (dynamic height), of the layer of water between the surface and the designated standard pressure. Geopotential anomaly is the difference between the geopotential thickness of the observed layer and the geopotential thickness of a layer bounded by the same pressures but having standard temperature 0°C and salinity 35‰. The tabulated anomaly is determined from an approximation of the integral

$$\Delta D = \int_0^{p_z} \delta\ dp$$

where p is pressure in decibars (assumed equal to depth in meters) and subscript z denotes the value at the bottom of the layer under consideration. Since geopotential thickness is the product of geometrical thickness and the acceleration of gravity, a dynamic meter is equal to 10^5 ergs per gram and is the change in geopotential over a vertical distance of approximately 1.02 meter.

SUPPLEMENTARY STATION INFORMATION

Supplementary information about each station is to be found just above the tabulated data. This information includes name of ship, geographical location of station, date and time of observation, depth of water (in fathoms), a description of surface weather and sea state,

wind direction and force (Beaufort scale), and wire angle. When there is more than one cast on a station, messenger times and wire angles are given for the casts in the order of increasing depth.

NOTES ON THE TABULATION OF DATA

1. Observed temperatures obtained by bucket thermometer, thermograph or bathythermograph are reported only to tenths of a degree. Reversing thermometer temperatures are reported to hundredths of a degree.

2. Missing observed values are indicated by a hyphen (-).

3. Extrapolated values and values interpolated between remote observations are entered within parentheses.

4. Data from different casts on a station are separated by a blank line.

5. The following notations have been used where appropriate:

p: pretrip or posttrip (premature or delayed closure of water bottle and reversal of thermometers)

Values which are not used in interpolation because they seem to be in error are indicated as follows:

r: rejected value

u: uncertain value

OBSERVATIONS OF THE SCRIPPS INSTITUTION OF OCEANOGRAPHY

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CREST; January 7, 1950; 0824 GCT; 35°52.5'N, 121°32'W; sounding, 220 fm; wind, 090°, force 1; weather, clear; sea, moderate; wire angle, 0°. 700A1 (72.52)

OBSERVED					INTERPOLATED					COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m
0	11.35	33.49	5.59		0	11.35	33.49	5.59		25.56	243.8	0.000
10	11.35	33.40	5.57		10	11.35	33.40	5.57		25.49	250.6	0.025
25	11.29	33.49	5.32		20	11.32	33.43	5.42		25.52	248.0	0.050
49	11.10	33.55	4.82		30	11.27	33.50	5.17		25.58	242.4	0.074
73	10.67	33.66	3.81		50	11.08	33.56	4.77		25.66	235.4	0.122
97	10.09	33.84	3.14		75	10.59	33.70	3.72		25.86	217.0	0.179
150	9.36	33.84	2.41		100	10.03	33.84	3.06		26.06	198.1	0.230
197	8.79	34.02	2.03		150	9.36	33.84	2.41		26.17	188.2	0.327
245	8.11	33.93	1.74		200	8.75	34.02	2.01		26.41	166.3	0.416
					250	(8.08)	(33.93)	(1.71)		(26.44)	(163.8)	(0.498)

CREST; January 7, 1950; 0635 GCT; 35°51'N, 121°38'W; sounding, 400 fm; wind, 090°, force 1; weather, partly cloudy; sea, moderate; wire angle, 0°. 700A2 (72.52)

0	11.42	33.48		0	11.42	33.48		25.54	245.9	0.000
10	11.37	33.49		10	11.37	33.49		25.55	244.6	0.024
25	11.29	33.49		20	11.33	33.49		25.56	243.7	0.049
49	10.96	33.48		30	11.26	33.49		25.58	242.9	0.073
73	10.04	33.66		50	10.95	33.48		25.62	238.8	0.122
149	9.06	33.86		75	10.01	33.67		25.93	209.8	0.178
197	8.44	33.93		100	9.61	33.76		26.07	197.2	0.228
245	7.99	34.20		150	9.04	33.86		26.24	181.7	0.323
294	7.42	34.11		200	8.42	33.95		26.41	166.5	0.411
398	6.14	33.96		250	7.93	34.20		26.68	141.7	0.487
497	5.99	34.13		300	7.35	34.10		26.68	141.6	0.558
601	5.56	34.31		400	6.14	33.96		26.74	137.2	0.697
				500	5.98	34.14		26.90	123.0	0.827
				600	5.56	34.31		27.08	106.4	0.942

CREST; January 7, 1950; 0239 GCT; 35°46'N, 121°51'W; sounding, 600 fm; wind, 090°, force 1; weather, missing; sea, missing; wire angle, 0°. 701A (72.56)

0	11.42	33.49	6.33	0.83	0	11.42	33.49	6.33	0.83	25.54	245.3	0.000
10	11.27	33.48	6.21	0.83	10	11.27	33.48	6.21	0.83	25.56	243.5	0.024
25	11.19	33.48	5.82	0.93	20	11.22	33.48	5.90	0.91	25.57	242.7	0.049
50	11.20	33.49	5.84	1.01	30	11.19	33.48	5.80	0.95	25.58	242.7	0.073
74	9.59	33.57	3.43	1.98	50	11.20	33.49	5.84	1.01	25.59	242.1	0.122
98	8.95	33.69	3.26	2.13	75	9.55	33.57	3.41	2.00	25.93	209.8	0.178
151	8.16	33.91	2.59	2.43	100	8.93	33.70	3.25	2.14	26.13	191.1	0.228
199	7.34	33.91	2.48	2.35	150	8.17	33.91	2.60	2.42	26.41	165.1	0.317
247	7.01	34.02	1.70	2.73	200	7.33	33.91	2.48	2.34	26.54	153.9	0.397
295	6.37	33.98	1.44	2.87	250	6.98	34.02	1.66	2.74	26.67	141.9	0.471
398	5.57	34.11	1.03	3.11	300	6.33	33.98	1.42	2.88	26.73	136.8	0.541
496	5.18	34.22	0.57	3.27	400	5.57	34.11	1.02	3.12	26.93	118.9	0.668
601	5.09	34.27	0.39	3.42	500	5.19	34.22	0.57	3.28	27.06	107.2	0.782
700	4.74	34.29	0.38	3.41	600	5.08	34.27	0.39	3.42	27.11	103.3	0.887
810	4.32	34.38	0.44	3.43	700	4.74	34.29	0.38	3.41	27.16	98.8	0.988
					800	4.35	34.37	0.44	3.42	27.27	89.0	1.082

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OBSERVED					INTERPOLATED					COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m

702A (71.66) CREST; January 6, 1950; 2009 GCT; 35°26'N, 122°35'W; sounding, 1,950 fm; wind, 200°, force 1; weather, partly cloudy; sea, moderate; wire angle, 0°.

0	11.43	33.39	5.42	0.94	0	11.43	33.39	5.42	0.94	25.46	253.0	0.000
10	11.30	33.39	5.68	0.96	10	11.30	33.39	5.68	0.96	25.49	250.5	0.025
25	11.29	33.40	5.52	0.95	20	11.29	33.40	5.60	0.95	25.50	249.8	0.050
50	11.27	33.48	5.60	1.01	30	11.30	33.41	5.53	0.96	25.51	249.5	0.075
74	8.84	33.28	4.46	1.64	50	11.27	33.48	5.60	1.01	25.56	244.3	0.125
98	8.52	33.46	3.16	2.15	75	8.80	33.28	4.30	1.72	25.83	219.8	0.182
151	7.60	33.91	2.88	2.31	100	8.52	33.48	3.12	2.17	26.02	201.4	0.235
199	7.03	33.95	2.45	2.53	150	7.61	33.90	2.89	2.31	26.49	157.8	0.325
247	6.50	33.98	2.01	2.83	200	7.02	33.95	2.43	2.54	26.61	146.8	0.402
296	5.93	33.98	1.70	2.96	250	6.50	33.98	1.98	2.84	26.71	137.2	0.472
398	6.10	34.13	0.57	3.36	300	5.93	33.98	1.67	2.97	26.78	131.8	0.540
498	5.71	34.20	0.36	3.33	400	6.08	34.14	0.52	3.36	26.89	122.9	0.667
602	5.21	34.20	0.47	3.60	500	5.71	34.20	0.36	3.33	26.98	115.3	0.786
701	4.74	34.20	0.36	3.54	600	5.22	34.20	0.47	3.60	27.04	110.1	0.899
805	4.29	34.27	0.39	3.62	700	4.75	34.20	0.36	3.54	27.09	105.4	1.007
1004	3.79	34.31	0.60	3.51	800	4.33	34.27	0.39	3.62	27.19	96.3	1.108
1209	3.26	33.47	0.91	3.53	1000	3.82	34.31	0.60	3.51	27.28	89.1	1.293

703A (71.76) CREST; January 6, 1950; 1356 GCT; 35°10'N, 123°18'W; sounding, missing; wind, 050°, force 2; weather, clear; sea, moderate; wire angle, 35°.

0	12.37	32.99	6.45	0	12.37	32.99	6.45	24.98	298.9	0.000
8	12.32	33.01	5.76r	10	12.30	33.01	6.50	25.01	296.2	0.030
19	11.40	32.95	6.52	20	11.40	32.95	6.52	25.13	284.9	0.059
39	11.29	33.15	6.11	30	11.33	33.02	6.35	25.20	278.8	0.087
58	11.18	33.13	6.12	50	11.24	33.14	6.10	25.31	268.9	0.142
77	10.66	33.22	6.51	75	10.76	33.21	6.50	25.45	256.0	0.207
113	8.66	33.39	4.35	100	8.95	33.29	4.97	25.81	221.8	0.267
144	8.31	33.15	4.87	150	8.24	33.19	3.13	25.84	219.5	0.378
176	7.92	33.95	2.56	200	7.67	33.87	2.64	26.46	161.6	0.473
211	7.52	33.86	2.67	250	7.15	33.88	2.44	26.54	154.4	0.552
286	6.65	33.93	2.08	300	6.42	33.95	1.95	26.69	140.1	0.625
358	5.84	34.04	1.44	400	6.00	34.11	0.96	26.87	124.3	0.758
434	6.10	34.14	0.64	500	5.62	34.14	0.48	26.94	118.6	0.879
506	5.55	34.13	0.48	600	4.78	34.17	0.40	27.07	107.1	0.992
582	4.86	34.14	0.41	700	4.44	34.34	0.42	27.24	91.3	1.091
735	4.36	34.36	0.44	800	4.20	34.35	0.50	27.27	88.7	1.181
913	3.94	34.34	0.63	1000	(3.76)	(34.34)		(27.31)	(86.1)	(1.356)

704A (71.85) CREST; January 6, 1950; 0711 GCT; 34°55'N, 124°03'W; sounding, missing; wind, 020°, force 3; weather, partly cloudy; sea, very rough; wire angle, 0°.

0	13.46	32.99	5.39	0.58	0	13.46	32.99	5.39	0.58	24.77	319.0	0.000
10	13.47	32.99	5.74	0.58	10	13.47	32.99	5.74	0.58	24.76	319.7	0.032
25	13.47	32.99	5.63	0.55	20	13.48	32.99	5.68	0.56	24.76	320.1	0.064
49	13.48	32.98	5.74	0.58	30	13.48	32.99	5.65	0.56	24.76	320.3	0.096
74	13.47	32.98	5.26	0.48	50	13.49	32.98	5.74	0.58	24.75	321.7	0.160
98	12.40	33.15	5.24	0.72	75	13.48	32.98	5.26	0.48	24.75	322.1	0.241
215p	7.96	33.84	2.76	1.95	100	(12.30)	(33.15)	(5.23)	(0.81)	(25.12)	(287.9)	(0.317)
343p	6.72	34.00	2.09	2.44	150	(8.80)	(33.58)	(3.77)	(1.52)	(26.06)	(198.9)	(0.439)
456p	5.91	34.07	1.31	2.76	200	(8.15)	(33.80)	(2.96)	(1.87)	(26.33)	(173.6)	(0.532)
570p	5.40	34.18	0.61	3.23	250	7.60	33.90	2.50	2.13	26.49	159.2	(0.615)
677p	5.08	34.31	0.25	3.27	300	7.12	33.97	2.30	2.31	26.61	148.0	(0.692)
789p	4.53	34.34	0.33	3.30	400	6.28	34.03	1.70	2.60	26.77	133.8	(0.833)
998p	3.91	34.45	0.62	3.09r	500	5.68	34.11	1.06	2.95	26.91	121.6	(0.961)
1203p	3.37	34.49	0.79	3.23	600	5.32	34.21	0.44	3.25	27.03	110.8	(1.077)
					700	4.97	34.32	0.25	3.28	27.16	99.1	(1.182)
					800	4.50	34.34	0.35	3.30	27.23	93.0	(1.278)
					1000	3.90	34.45	0.63	3.28	27.38	79.7	(1.450)

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

CREST; January 5, 1950; 2353 GCT; 34°39'N, 124°48'W; sounding, 2,375 fm; wind, 340°, force 5; weather, cloudy; sea, high; wire angle, 15°. 705A (70.95)

0	13.54	33.07	5.55	0.71	0	13.54	33.07	5.55	0.71	24.81	315.0	0.000	
10	13.54	33.07	4.89r	0.58	10	13.54	33.07	5.60	0.58	24.81	315.2	0.031	
24	13.50	33.05	5.63	0.62	20	13.52	33.05	5.62	0.61	24.80	316.5	0.063	
53	13.24	33.06	5.71	0.63	30	13.48	33.05	5.66	0.62	24.81	316.0	0.094	
77	12.16	33.13	5.56	0.79	50	13.30	33.05	5.70	0.62	24.85	312.9	0.157	
105	10.20	33.19	4.92	1.21	75	12.45	33.12	5.60	0.78	25.07	292.5	0.233	
167p	8.85	33.78	3.06	2.34	100	10.62	33.18	5.02	1.13	25.45	256.4	0.301	
203p	8.58	34.00	2.02	2.52	150	9.06	33.64	3.82	2.19	26.07	198.4	0.415	
338p	7.33	34.13	1.27	3.01	200	8.60	33.99	2.08	2.51	26.41	166.3	0.505	
456p	6.37	34.20	0.74	3.18	250	8.18	34.06	1.62	2.71	26.53	155.7	0.586	
599p	5.17	34.20	0.64	3.45	300	7.70	34.10	1.39	2.90	26.63	146.6	0.662	
724p	4.85	34.33	0.34	3.51	400	6.80	34.17	0.97	3.10	26.81	130.4	0.801	
836p	4.41	34.38	0.44	3.77r	500	6.02	34.20	0.70	3.26	26.94	119.2	0.926	
1072p	3.82	34.47	0.67	3.31	600	5.17	34.20	0.63	3.45	27.05	109.5	1.040	
1281p	3.31	34.51	0.87	3.69r	700	4.90	34.30	0.37	3.51	27.15	99.9	1.144	
					800	4.57	34.37	0.41	3.49	27.25	91.5	1.240	
					1000	3.95	34.45	0.60	3.38	27.38	80.2	1.412	

HORIZON; January 7, 1950; 0600 GCT; 34°22.5'N, 125°33.5'W; sounding, 2,700 fm; wind, 100°, force 2; weather, cloudy; sea, very rough; wire angle, 1°. 706A (70.105)

0	13.15	33.15	5.26	0.55	0	13.15	33.15	5.26	0.55	24.95	301.5	0.000	
10	13.10	33.15	5.75	0.53	10	13.10	33.15	5.75	0.53	24.96	300.8	0.030	
24	12.99	33.17	5.73	0.55	20	13.03	33.16	5.74	0.54	24.98	299.1	0.060	
49	12.75r	33.26	5.66	0.57	30	12.94	33.19	5.73	0.56	25.03	295.3	0.090	
73	10.33	33.22	4.86	1.09	50	12.17	33.26	5.64	0.57	25.23	276.5	0.147	
98	9.43	33.46	3.90	1.44	75	10.23	33.22	4.79	1.14	25.54	246.8	0.212	
151	8.56	33.87	2.55	1.94	100	9.40	33.49	3.80	1.46	25.89	214.0	0.270	
201	7.90	34.02	2.27	1.98	150	8.60	33.87	2.58	1.94	26.32	174.3	0.367	
250	7.34	34.04	2.29	2.07	200	7.91	34.02	2.28	1.97	26.54	153.8	0.449	
299	6.74	34.05	1.81	2.21	250	7.34	34.04	2.29	2.07	26.64	145.2	0.524	
403	5.83	34.13	0.99	2.52	300	6.74	34.05	1.79	2.22	26.73	137.1	0.594	
502	5.39	34.20	0.61	2.66	400	5.85	34.13	1.02	2.51	26.91	118.9	0.722	
607	4.92	34.30	0.39	2.80	500	5.40	34.20	0.63	2.66	27.02	111.3	0.837	
707	4.65	34.36	0.33	2.84	600	4.95	34.29	0.40	2.79	27.14	100.2	0.943	
812	4.26	34.41	0.37	2.86	700	4.66	34.36	0.34	2.84	27.23	92.3	1.039	
1012	3.67	34.45	0.53	2.80	800	4.30	34.40	0.36	2.86	27.30	86.2	1.128	
1217	3.26	34.51	0.77	2.84	1000	3.70	34.45	0.51	2.80	27.40	77.3	1.293	

HORIZON; January 7, 1950; 0000 GCT; 34°11'N, 126°16'W; sounding, 2,650 fm; wind, 360°, force 1; weather, cloudy; sea, rough; wire angle, 4°. 707A (70.115)

0	15.01	33.19	5.25	0.42	0	15.01	33.19	5.25	0.42	24.60	335.5	0.000	
10	14.99	33.31	5.37	0.43	10	14.99	33.31	5.37	0.43	24.69	326.6	0.033	
25	15.03	33.22	5.28	0.41	20	15.00	33.27	5.31	0.42	24.66	329.8	0.066	
50	15.03	33.22	5.07	0.42	30	15.02	33.22	5.26	0.41	24.62	334.3	0.099	
75	15.05	33.30	5.18	0.40	50	15.03	33.22	5.07	0.42	24.62	334.9	0.166	
100	11.57	33.13	5.00	0.67	75	15.05	33.30	5.18	0.40	24.67	330.2	0.249	
155	9.40	33.49	4.23	1.28	100	11.57	33.13	5.00	0.67	25.24	276.5	0.325	
205	8.80	33.75	2.57	1.84	150	9.54	33.46	4.29	1.23	25.85	219.2	0.450	
254	8.07	33.93	2.84	1.80	200	8.81	33.73	2.57	1.82	26.18	188.8	0.551	
303	7.28	34.00	2.26	2.06	250	8.16	33.93	2.84	1.80	26.43	165.0	0.639	
407	6.28	34.09	1.17	2.48	300	7.36	34.00	2.32	2.04	26.61	149.0	0.717	
506	5.48	34.07	0.70	2.46a)	400	6.32	34.08	1.21	2.47	26.81	130.7	0.857	
609	4.93	34.18	0.42	2.75	500	5.54	34.07	0.73	2.46	26.90	122.6	0.984	
708	4.44	34.20	0.40	2.82	600	4.94	34.17	0.42	2.63	27.05	109.1	1.100	
812	4.26	34.43	0.39	2.80	700	4.49	34.20	0.40	2.82	27.12	102.3	1.206	
1011	3.81	34.40	0.61	2.76	800	4.27	34.41	0.40	2.81	27.31	85.1	1.299	
1216	3.28	34.43	0.77	2.88	1000	3.84	34.40	0.61	2.76	27.35	82.7	1.467	

a) Alternate value, 2.68 μg at/L, not used in interpolation.

SIO

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OBSERVED					INTERPOLATED					COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg at/L	Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg at/L	σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m

708A (69.125) HORIZON; January 6, 1950; 1800 GCT; 33°51'N, 127°02'W; sounding, 2,340 fm; wind, 100°, force 2; weather, cloudy; sea, rough; wire angle, 5°.

0	14.97	33.28	5.34	0.46	0	14.97	33.28	5.34	0.46	24.67	328.1	0.000
10	14.95	33.21	5.29	0.48	10	14.95	33.21	5.29	0.48	24.63	333.0	0.033
25	14.99	33.21	5.26	0.50	20	14.97	33.20	5.26	0.50	24.61	334.5	0.066
49	14.96	32.99	5.23	0.52	30	14.98	33.21	5.25	0.51	24.62	334.3	0.100
73	14.99	33.22	5.42	0.49	50	14.96	32.99	5.22	0.52	24.46	350.1	0.168
98	12.97	33.06	5.31	0.62	75	14.98	33.22	5.41	0.50	24.65	332.5	0.254
152	9.84	33.39	4.12	1.43	100	12.73	33.06	5.31	0.66	24.97	302.5	0.333
201	8.88	33.78	2.34	1.98	150	9.88	33.37	4.22	1.41	25.72	231.1	0.466
249	8.64	34.00	1.70	2.27	200	8.91	33.77	2.40	1.97	26.19	187.4	0.571
298	8.03	34.25	1.77	2.28	250	8.62	34.00	1.70	2.27	26.42	166.8	0.660
402	7.09	34.09	1.10	2.62	300	8.02	34.25	1.76	2.29	26.70	140.2	0.736
502	6.09	34.14	0.70	2.64	400	7.12	34.09	1.13	2.62	26.71	140.7	0.877
607	5.41	34.29	0.41	2.89	500	6.13	34.14	0.70	2.64	26.88	125.0	1.010
707	4.83	34.22	0.34	2.94	600	5.44	34.28	0.43	2.87	27.07	107.3	1.126
812	4.51	34.33	0.34	3.02	700	4.86	34.23	0.35	2.94	27.11	104.5	1.232
1012	3.96	34.23	0.53	3.01	800	4.54	34.32	0.33	3.01	27.21	94.9	1.331
1217	3.41	34.42	0.78	2.97a)	1000	4.00	34.23	0.51	3.01	27.20	97.1	1.523

709A (69.135) HORIZON; January 6, 1950; 1200 GCT; 33°39'N, 127°48'W; sounding, 2,500 fm; wind, 360°, force 3; weather, cloudy; sea, very rough; wire angle, 12°.

0	15.53	33.26	5.37	0.46	0	15.53	33.26	5.37	0.46	24.54	341.0	0.000
10	15.53	33.26	5.38	0.44	10	15.53	33.26	5.38	0.44	24.54	341.3	0.034
25	15.56	33.26	5.31	0.42	20	15.55	33.26	5.34	0.42	24.53	341.9	0.068
54	15.56	33.26	5.36	0.46	30	15.57	33.26	5.31	0.42	24.53	342.9	0.102
78	12.94	33.26	5.55	0.49	50	15.57	33.26	5.35	0.46	24.53	343.1	0.171
106	12.04	33.21	5.29	0.60	75	13.16	33.26	5.54	0.48	25.04	295.4	0.251
159	9.82	33.39	4.50	1.24	100	12.17	33.21	5.36	0.56	25.19	281.3	0.323
211	8.34	33.77	3.97	1.53	150	10.28	33.34	4.64	1.16	25.63	239.9	0.453
263	7.64	33.93	3.36	1.84	200	8.51	33.70	4.10	1.27	26.20	186.6	0.560
316	6.82	33.96	2.73	2.11	250	7.85	33.91	3.52	1.75	26.46	161.9	0.647
425	5.70	34.02	2.16	2.48	300	7.09	33.95	2.91	2.04	26.60	149.1	0.724
532	5.28	34.14	0.66	2.68	400	5.88	34.00	2.25	2.40	26.80	130.8	0.864
640	4.68	34.23	0.44	2.85	500	5.39	34.10	0.90	2.63	26.94	118.6	0.989
749	4.23	34.31	0.37	3.02	600	4.93	34.19	0.49	2.78	27.06	107.4	1.102
853	3.94	34.39	0.37	3.02	700	4.36	34.28	0.39	2.97	27.20	94.8	1.203
1067	3.45	34.49	0.66	2.90	800	4.08	34.35	0.37	3.02	27.28	87.3	1.294
1272	3.08	34.37	0.86	2.84	1000	3.59	34.47	0.54	2.93	27.43	74.6	1.456

701A (69.144) HORIZON; January 6, 1950; 0600 GCT; 33°19'N, 128°32'W; sounding, 2,700 fm; wind, 010°, force 4; weather, cloudy; sea, very rough; wire angle, 26°.

0	16.19	33.60	5.30	0.42	0	16.19	33.60	5.30	0.42	24.65	330.7	0.000
22	16.18	33.60	5.26	0.38	10	16.20	33.60	5.28	0.40	24.65	331.0	0.033
49	16.20	33.60	5.30	0.36	20	16.19	33.60	5.26	0.38	24.65	331.1	0.066
72	14.95	33.58	5.51	0.37	30	16.19	33.60	5.26	0.37	24.65	331.4	0.099
98	13.02	33.35	5.35	0.45	50	16.20	33.60	5.31	0.36	24.65	332.1	0.166
147	11.45	33.36	4.99	0.81	75	14.73	33.57	5.50	0.38	24.95	303.8	0.245
194	9.32	33.55	4.47	1.19	100	13.02	33.35	5.35	0.46	25.13	285.8	0.319
241	8.51	33.85	4.02	1.51	150	11.30	33.36	4.95	0.84	25.47	255.7	0.454
287	7.74	33.95	3.48	1.76	200	9.22	33.59	4.40	1.24	26.00	205.4	0.570
384	6.42	33.97	2.55	2.15	250	8.35	33.88	3.90	1.56	26.37	171.5	0.664
477	5.35	34.04	1.29	2.48	300	7.53	33.96	3.30	1.82	26.55	154.5	0.745
576	4.83	34.14	0.73	2.73	400	6.22	33.98	2.34	2.21	26.74	136.7	0.891
673	4.44	34.22	0.48	2.90	500	5.19	34.06	1.11	2.54	26.93	119.1	1.019
768	4.15	34.31	0.37	2.87	600	4.72	34.16	0.65	2.78	27.06	107.1	1.132
969	3.67	34.43	0.49	2.80	700	4.35	34.24	0.43	2.90	27.17	97.6	1.234
1167	3.30	34.49	0.66	2.70	800	4.06	34.33	0.39	2.86	27.27	88.5	1.327
					1000	3.62	34.44	0.51	2.79	27.40	77.1	1.493

a) Alternate value, 3.07 µg at/L, not used in interpolation.

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OBSERVED					INTERPOLATED					COMPUTED			
Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m	

CREST; January 7, 1950; 1600 GCT; 35°36'N, 122°06'W; sounding, 950 fm; wind, 160°, force 2; weather, cloudy; sea, moderate; wire angle, 12°. 701K-1 (72.60)

0	11.78	33.41	5.23	0.70	0	11.78	33.41	5.23	0.70	25.42	257.2	0.000	
9	11.77	33.41	3.78r	0.69	10	11.78	33.41	5.12	0.70	24.42	257.4	0.026	
23	11.79	33.42	4.73	0.71	20	11.79	33.42	4.82	0.70	25.43	257.0	0.051	
48	11.71	33.43	4.44	0.82	30	11.78	33.42	4.65	0.73	25.42	257.4	0.077	
72	10.27	33.51	3.75	1.62	50	11.71	33.43	4.40	0.83	25.45	255.6	0.128	
96	9.27	33.68	2.90	2.10	75	10.05	33.53	3.61	1.68	25.82	220.8	0.188	
148	8.36	33.91	2.30	2.34	100	9.20	33.71	2.85	2.13	26.10	194.4	0.240	
196	7.85	34.02	1.99	2.56	150	8.33	33.92	2.30	2.35	26.40	166.6	0.330	
243	7.32	34.07	1.61	2.67	200	7.82	34.03	1.96	2.57	26.56	152.0	0.410	
291	6.58	34.04	1.66	2.72	250	7.23	34.07	1.58	2.68	26.68	141.4	0.483	
390	5.53	34.10	1.11	3.12	300	6.49	34.04	1.64	2.74	26.76	134.3	0.553	
485	5.21	34.18	0.60	3.44	400	5.47	34.11	1.05	3.17	26.94	117.7	0.678	
584	5.01	34.29	0.37	3.53	500	5.20	34.19	0.55	3.46	27.03	109.5	0.792	
679	4.86	34.34	0.30	3.62	600	5.01	34.30	0.35	3.55	27.14	100.2	0.897	
781	4.43	34.40	-	-	700	4.80	34.35	0.30	3.62	27.21	94.9	0.994	
977	3.93	34.45	0.60	3.54	800	4.35	34.41	0.37	3.57	27.30	86.0	1.085	
1181	3.39	34.49	0.74	3.52	1000	3.88	34.45	0.60	3.54	27.38	79.5	1.250	

CREST; January 7, 1950; 1800 GCT; 35°36'N, 122°06'W; sounding, 950 fm; wind, 140°, force 3; weather, cloudy; sea, rough; wire angle, 23°. 701K-2 (72.60)

0	11.82	33.44	5.21	0.75	0	11.82	33.44	5.21	0.75	25.43	255.9	0.000	
9	11.82	33.42	5.36	0.71	10	11.81	33.42	5.33	0.71	25.42	257.2	0.026	
23	11.80	33.43	5.26	0.74	20	11.80	33.43	5.28	0.73	25.43	256.5	0.051	
46	11.72	33.43	5.05	0.84	30	11.78	33.43	5.19	0.77	25.43	256.5	0.077	
67	10.27	33.49	3.64	1.68	50	11.66	33.43	4.90	0.87	25.45	254.8	0.128	
89	9.82	33.58	3.50	1.90	75	10.10	33.52	3.55	1.62	25.80	222.3	0.188	
135	8.49	33.91	2.59	2.32	100	9.55	33.67	3.30	2.05	26.01	203.0	0.241	
178	7.94	34.02	2.19	2.56	150	8.30	33.95	2.44	2.40	26.43	163.8	0.332	
221	7.36	34.07	1.72	2.71	200	7.66	34.05	1.94	2.64	26.60	148.0	0.411	
265	6.64	34.07	1.76	2.82	250	6.86	34.07	1.73	2.78	26.73	136.3	0.482	
359	5.73	34.08	1.26	3.06	300	6.24	34.07	1.64	2.92	26.81	129.0	0.548	
450	5.19	34.11	0.85	3.24	400	5.43	34.09	1.06	3.13	26.93	118.7	0.671	
545	5.06	34.27	0.40	3.47	500	5.10	34.19	0.59	3.39	27.05	108.3	0.786	
636	5.00	34.33	0.39	3.50	600	5.02	34.31	0.35	3.49	27.15	99.6	0.890	
731	4.65	34.40	0.36	3.53	700	4.80	34.38	0.36	3.52	27.23	92.7	0.986	
920	4.09	34.49	0.54	3.48	800	4.45	34.44	0.39	3.50	27.32	85.0	1.074	
1121	3.55	34.49	0.72	3.48	1000	3.87	34.50	0.61	3.48	27.42	75.6	1.235	

CREST; January 7, 1950; 2000 GCT; 35°36'N, 122°06'W; sounding, 950 fm; wind, 160°, force 4; weather, cloudy; sea, rough; wire angle, 31°. 701K-3 (72.60)

0	11.89	33.40	5.78	0.81	0	11.89	33.40	5.78	0.81	25.39	260.0	0.000	
8	11.88	33.31	5.76	0.78	10	11.87	33.31	5.76	0.78	25.32	266.3	0.026	
21	11.75	33.39	5.79	0.89	20	11.75	33.39	5.79	0.87	25.41	258.8	0.053	
46	11.60	33.40	5.96	1.00	30	11.69	33.40	5.82	0.92	25.43	257.2	0.078	
66	9.85	33.55	3.88	1.88	50	11.56	33.40	5.85	1.06	25.45	255.3	0.130	
90	9.34	33.66	3.54	2.08	75	9.65	33.60	3.69	1.97	25.94	209.1	0.188	
132	8.47	33.91	2.82	2.38	100	9.12	33.72	3.36	2.13	26.12	192.4	0.238	
175	7.82	33.93	2.72	2.41	150	8.16	33.92	2.77	2.40	26.43	164.1	0.327	
219	7.41	33.95	2.48	2.57	200	7.55	33.94	2.61	2.47	26.53	154.7	0.407	
264	7.02	34.02	1.84	2.80	250	7.16	34.00	2.01	2.73	26.63	145.5	0.482	
359	5.70	34.00	1.77	3.02a)	300	6.54	34.01	1.76	2.91	26.72	137.3	0.553	
452	5.23	34.02	1.00	3.25	400	5.40	34.00	1.69	3.12	26.86	124.9	0.683	
547	5.10	34.20	-	3.41	500	5.17	34.11	1.19	3.34	26.97	115.1	0.803	
642	4.95	34.27	0.35	3.48	600	5.04	34.24	0.49	3.46	27.09	105.1	0.914	
735	4.66	34.45	0.44	3.43	700	4.82	34.40	0.40	3.45	27.24	91.5	1.012	
928	4.02	34.38	0.56	3.38	800	4.40	34.43	0.49	3.41	27.31	85.1	1.100	
1124	3.54	34.36	0.74	3.31	1000	3.89	34.37	0.63	3.36	27.32	85.4	1.271	

a) Alternate value, 3.12 μg at/L, not used in interpolation.

SIO

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

701K-4 (72.60) CREST; January 7, 1950; 2200 GCT; 35°36'N, 122°06'W; sounding, 950 fm; wind, 140°, force 5; weather, overcast; sea, rough; wire angle, 29°.

0	11.81	33.39	5.84	0.76	0	11.81	33.39	5.84	0.76	25.40	259.2	0.000
8	11.82	33.39	5.82	0.75	10	11.83	33.39	5.80	0.74	25.39	259.7	0.026
26	11.82	33.46	5.82	0.74	20	11.82	33.44	5.81	0.74	25.43	256.2	0.052
52	11.62	33.37	5.42	0.84	30	11.78	33.46	5.79	0.75	25.46	254.3	0.077
78	9.44	33.62	3.38	2.00	50	11.63	33.38	5.48	0.82	25.42	258.1	0.128
104	9.19	33.80	3.02	2.04	75	9.60	33.59	3.52	1.98	25.94	209.2	0.187
156	8.29	33.93r	3.15	2.08	100	9.22	33.78	3.07	2.04	26.15	189.5	0.237
206	7.66	33.93r	2.41	2.48	150	8.39	(33.85)	3.13	2.06	(26.33)	(172.6)	(0.327)
255	7.25	34.02	1.70	2.75	200	7.72	(33.98)	2.51	2.43	(26.54)	(154.2)	(0.409)
304	6.23	34.09r	15.8	2.88	250	7.30	(34.01)	1.75	2.73	(26.62)	(146.7)	(0.484)
399	5.42	34.02	1.00	3.20	300	6.33	34.04	1.59	2.87	26.77	132.5	(0.554)
501	5.18	34.13	0.49	3.44	400	5.41	34.02	1.00	3.20	26.87	123.6	(0.682)
600	5.07	34.27	0.39	3.48	500	5.18	34.13	0.50	3.43	26.99	113.8	(0.800)
704	4.74	34.38	0.30	3.50	600	5.07	34.27	0.39	3.48	27.11	103.1	(0.910)
807	4.35	34.36	0.46	3.49	700	4.76	34.38	0.30	3.50	27.23	92.1	(1.007)
1012	3.82	34.38	0.60	3.41	800	4.38	34.36	0.45	3.49	27.26	90.0	(1.098)
1221	3.29	34.54	0.84	3.38	1000	3.86	34.38	0.60	3.42	27.33	84.3	(1.272)

701K-5 (72.60) CREST; January 8, 1950; 0000 GCT; 35°36'N, 122°06'W; sounding, 950 fm; wind, 160°, force 5; weather, overcast; sea, rough; wire angle, 30°.

0	11.76	33.41	6.08	0.83	0	11.76	33.41	6.08	0.83	25.42	256.9	0.000
8	11.76	33.42	5.94	0.78	10	11.75	33.42	5.94	0.78	25.43	256.2	0.026
25	11.59	33.44	6.08	0.82	20	11.66	33.44	6.05	0.81	25.46	253.4	0.051
51	11.52	33.44	5.98	0.90	30	11.58	33.44	6.08	0.83	25.48	252.3	0.076
77	9.71	33.59	3.53	2.18a)	50	11.54	33.44	5.98	0.89	25.48	252.1	0.127
102	9.20	33.78	3.09	2.29	75	9.77	33.53	3.64	2.13	25.86	216.3	0.185
152	8.39	33.92	3.19	2.28	100	9.22	33.77	3.13	2.28	26.14	190.4	0.236
200	7.58	34.04	2.27	2.70	150	8.42	33.91	3.18	2.28	26.38	168.6	0.326
249	7.11	34.07	1.60	3.16	200	7.58	34.04	2.27	2.70	26.60	147.7	0.405
298	6.15	34.04	1.67	3.33	250	7.12	34.07	1.60	3.17	26.69	139.9	0.477
394	5.58	34.05	1.21	3.49	300	6.13	34.04	1.66	3.33	26.80	129.8	0.546
496	5.17	34.22	0.54	3.65b)	400	5.56	34.05	1.15	3.50	26.88	123.1	0.670
596	5.03	34.33	-	3.81	500	5.17	34.22	0.52	3.66	27.06	107.0	0.786
701	4.70	34.37	0.37	3.93	600	5.05	34.33	0.43	3.82	27.16	98.5	0.889
802	4.34	34.41	0.44	3.81	700	4.71	34.37	0.37	3.93	27.23	92.3	0.984
1006	3.82	34.47	0.55	3.76	800	4.35	34.41	0.43	3.81	27.30	86.0	1.073
1211	3.29	34.51	0.81	3.79	1000	3.84	34.47	0.52	3.76	27.40	77.5	1.237

701K-6 (72.60) CREST; January 8, 1950; 0200 GCT; 35°36'N, 122°06'W; sounding, 950 fm; wind, 160°, force 5; weather, overcast; sea, rough; wire angle, 32°.

0	11.86	33.40	4.66r	0.88	0	11.86	33.40	(5.26)	0.88	25.40	259.1	0.000
8	11.85	33.42	5.26	0.88	10	11.85	33.42	5.26	0.88	25.41	258.0	0.026
25	11.80	33.40	4.55r	0.83	20	11.82	33.41	5.30	0.84	25.41	258.3	0.052
50	11.66	33.42	5.43	0.95	30	11.78	33.40	5.35	0.84	25.41	258.7	0.078
75	10.13	33.49	4.01	1.81	50	11.66	33.42	5.43	0.95	25.45	255.5	0.129
99	9.33	33.66	3.30	2.23	75	10.13	33.49	4.01	1.81	25.77	225.0	0.189
145	8.31	-	-	-	100	9.30	33.66	3.28	2.24	26.04	199.7	0.242
190	7.76	34.01	2.30	2.59	150	8.23	33.89	2.75	2.42	26.39	167.4	0.334
237	7.38	34.08	1.70	2.86	200	7.68	34.03	2.17	2.64	26.58	149.9	0.414
284	6.74	34.04	1.66	3.08	250	7.29	34.08	1.68	2.92	26.68	141.4	0.486
375	5.58	34.07	1.27	3.36	300	6.44	34.04	1.61	3.14	26.76	133.8	0.555
472	5.26	34.18	0.61	3.58	400	5.49	34.09	1.10	3.43	26.92	119.3	0.681
564	4.98	34.27	0.42	3.68	500	5.17	34.21	0.53	3.62	27.05	107.6	0.795
661	4.91	34.35	0.33	3.72	600	4.96	34.30	0.37	3.70	27.15	99.5	0.899
754	4.65	34.40	0.38	3.58	700	4.85	34.38	0.35	3.67	27.22	93.2	0.995
945	3.99	34.47	0.58	3.59	800	4.49	34.42	0.44	3.58	27.30	86.8	1.085
1155	3.49	34.51	0.79	3.69	1000	3.85	34.48	0.63	3.60	27.41	76.8	1.248

a) Alternate value, 2.02 μg at/L, not used in interpolation.
b) Alternate value, 3.77 μg at/L, not used in interpolation.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

CREST; January 8, 1950; 0400 GCT; 35°36'N, 122°06'W; sounding, 950 fm; wind, 160°, force 6; weather, overcast; sea, rough; wire angle, 32°. 701K-7 (72.60)

0	11.72	33.49	5.59	0.74	0	11.72	33.49	5.59	0.74	25.49	250.3	0.000
8	11.71	33.39	5.79	0.82	10	11.70	33.37	5.75	0.82	25.40	259.2	0.026
25	11.64	33.31	5.55	0.78	20	11.67	33.32	5.65	0.79	25.37	262.5	0.052
51	11.40	33.40	5.23	0.95	30	11.61	33.31	5.52	0.78	25.37	262.5	0.078
75	9.77	33.55	3.18	1.96	50	11.43	33.38	5.27	0.93	25.46	254.5	0.130
98	9.21	33.57	3.02	2.14	75	9.77	33.55	3.18	1.96	25.88	214.6	0.188
145	8.37	33.84	2.95	2.19	100	9.17	33.57	3.01	2.17	25.99	204.5	0.241
191	7.81	33.93	2.85	2.34	150	8.30	33.85	2.95	2.20	26.35	171.3	0.334
238	7.51	34.00	2.06	2.66a)	200	7.75	33.95	2.77	2.38	26.51	156.8	0.417
285	7.11	33.98	1.52	2.92	250	7.44	34.00	1.89	2.73	26.59	149.3	0.493
380	5.60	33.98	1.21	3.30	300	6.88	33.98	1.48	3.00	26.65	144.1	0.566
480	5.23	34.11	0.64	3.49	400	5.50	33.99	1.08	3.34	26.84	126.9	0.702
576	5.04	34.11	0.46	3.62	500	5.17	34.12	0.58	3.52	26.98	114.4	0.822
675	4.91	34.34	0.36	3.63	600	5.01	34.13	0.42	3.63	27.01	112.7	0.936
771	4.59	34.27	0.62	-	700	4.85	34.34	0.45	3.62	27.19	96.4	1.040
976	3.91	34.45	0.57	3.58	800	4.50	34.27	0.62	3.61	27.18	98.2	1.138
1180	3.35	34.42	0.75	3.50	1000	3.85	34.45	0.60	3.57	27.38	79.1	1.316

CREST; January 8, 1950; 0600 GCT; 35°36'N, 122°06'W; sounding, 950 fm; wind, 160°, force 7; weather, cloudy; sea, rough; wire angle, 35°. 701K-8 (72.60)

0	11.47	33.49	5.67	0.75	0	11.47	33.49	5.67	0.75	25.53	246.1	0.000
8	11.42	-	5.72	0.73	10	11.40	33.34	5.73	0.74	25.43	256.0	0.025
24	11.40	33.31	5.73	0.77b)	20	11.40	33.31	5.75	0.76	25.41	258.4	0.051
48	10.49	33.46	4.07	1.50	30	11.37	33.32	5.53	0.87	25.42	257.4	0.077
72	9.66	33.57	3.46	1.82	50	10.39	33.48	4.00	1.54	25.72	229.5	0.125
95	9.30	33.66	3.08	2.03c)	75	9.60	33.58	3.42	1.86	25.93	209.9	0.180
138	8.34	33.91	2.78	2.17	100	9.25	33.69	3.09	2.06	26.07	196.7	0.231
181	7.76	33.91	2.75	2.25	150	8.18	33.92	2.76	2.19	26.42	164.4	0.321
225	7.49	33.95	1.87	2.78	200	7.62	33.92	2.59	2.37	26.50	157.3	0.402
270	7.05	34.11	1.50	2.88	250	7.29	34.08	1.60	2.84	26.68	141.2	0.476
357	5.74	34.31r	1.35	3.12	300	6.58	34.10	1.49	2.95	26.79	131.2	0.545
451	5.26	34.02	0.73	3.37	400	5.46	34.03	1.07	3.24	26.88	123.4	0.671
541	5.12	34.20	0.41	3.56	500	5.17	34.14	0.52	3.48	27.00	112.8	0.790
639	5.01	34.27	0.31	3.56	600	5.06	34.24	0.30	3.56	27.09	105.1	0.899
735	4.69	34.34	0.36	3.54	700	4.86	34.32	0.35	3.55	27.18	97.9	1.001
935	3.92	34.47	0.53	3.56	800	4.42	34.39	0.42	3.54	27.28	88.3	1.094
1138	3.48	34.45	0.62	3.50	1000	3.75	34.47	0.55	3.55	27.41	76.3	1.258

CREST; January 8, 1950; 0800 GCT; 35°36'N, 122°06'W; sounding, 950 fm; wind, 160°, force 7; weather, overcast; sea, very rough; wire angle, 35°. 701K-9 (72.60)

0	11.61	33.42	6.23	0.72	0	11.61	33.42	6.23	0.72	25.46	253.4	0.000
7	11.60	33.42	5.85	0.70	10	11.60	33.42	5.90	0.70	25.46	253.6	0.025
24	11.60	33.42	5.98	0.74	20	11.61	33.42	5.95	0.72	25.46	254.0	0.051
48	10.64	33.50	4.18	1.55	30	11.56	33.43	5.89	0.86	25.47	252.6	0.076
72	9.61	33.68	3.31	1.94	50	10.55	33.50	4.05	1.62	25.71	230.6	0.124
95	9.06	33.82	3.29	2.10	75	9.57	33.71	3.34	1.98	26.04	199.7	0.178
140	8.21	33.95	2.98	2.16	100	8.94	33.84	3.25	2.11	26.24	180.9	0.226
184	7.69	34.02	2.77	2.28	150	8.05	33.97	2.96	2.18	26.48	158.8	0.310
229	7.38	34.08	2.03	2.72	200	7.60	34.04	2.59	2.44	26.60	147.9	0.388
275	6.89	34.09	1.62	2.92	250	7.20	34.09	1.80	2.84	26.70	139.5	0.459
365	5.62	34.08	1.31	3.12	300	6.52	34.09	1.56	2.98	26.79	131.1	0.527
459	5.31	34.20	0.70	3.38	400	5.45	34.11	1.08	3.24	26.94	117.4	0.651
549	5.11	34.29	0.41	3.44	500	5.23	34.25	0.54	3.41	27.08	105.6	0.763
648	4.97	34.38	0.33	3.50d)	600	5.04	34.34	0.35	3.47	27.17	97.7	0.864
748	4.59	34.42	0.35	3.42	700	4.82	34.40	0.34	3.46	27.24	91.5	0.959
952	4.01	34.47	0.54	3.36	800	4.42	34.44	0.38	3.39	27.32	84.5	1.047
1156	3.47	34.49	0.70	3.40	1000	3.89	34.48	0.56	3.36	27.41	77.2	1.208

a) Alternate value, 2.76 μg at/L, not used in interpolation.
b) Alternate value, 0.87 μg at/L, not used in interpolation.
c) Alternate value, 1.93 μg at/L, not used in interpolation.
d) Alternate value, 3.35 μg at/L, not used in interpolation.

SIO

CCOFI 5001

OBSERVED					INTERPOLATED					COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m
701K-10 (72.60) CREST; January 8, 1950; 1010 GCT; 35°36'N, 122°06'W; sounding, 950 fm; wind, 160°, force 7; weather, rain; sea, high; wire angle, 35°.												
0	11.61	33.42	5.60	0.58	0	11.61	33.42	5.60	0.58	25.46	253.6	0.000
8	11.58	-	5.79	0.59	10	11.57	(33.42)	5.80	0.60	(25.46)	(253.1)	(0.025)
24	11.54	-	5.72	0.60	20	11.56	(33.42)	5.75	0.60	(25.47)	(253.1)	(0.051)
49	11.36	33.42	5.43	0.71	30	11.54	(33.42)	5.69	0.61	(25.47)	(253.2)	(0.076)
73	9.75	33.59	3.48	1.61	50	11.10	33.42	5.40	0.74	25.55	244.0	(0.126)
96	9.27	33.70	3.11	1.81	75	9.75	33.60	3.36	1.66	25.92	210.8	(0.182)
143	8.53	33.87	3.09	1.79	100	9.18	33.72	3.11	1.81	26.11	193.3	(0.233)
188	7.86	33.96	2.77	1.97	150	8.42	33.89	3.06	1.80	26.36	170.3	(0.324)
236	7.42	33.99	1.64	2.30	200	7.70	33.97	2.23	2.04	26.53	154.5	(0.406)
283	7.07	34.04	1.60	2.62	250	7.32	34.00	1.61	2.42	26.61	147.7	(0.481)
373	5.70	34.04	1.26	2.84	300	6.80	34.04	1.57	2.68	26.71	138.7	(0.553)
471	5.29	34.16	0.62	3.12	400	5.53	34.06	1.05	2.92	26.89	122.1	(0.682)
564	5.17	34.17	0.40	3.25	500	5.23	34.17	0.44	3.17	27.01	111.4	(0.799)
664	4.87	34.36	0.41	3.30	600	5.10	34.21	0.40	3.27	27.06	107.9	(0.910)
761	4.54	34.40	0.37	2.24	700	4.78	34.38	0.40	3.28	27.23	92.5	(1.010)
961	3.93	34.47	0.52	3.30	800	4.40	34.41	0.40	3.25	27.30	86.6	(1.099)
1161	3.44	34.53	0.89	3.22	1000	3.82	34.48	0.58	3.29	27.41	66.5	(1.252)
701K-11 (72.60) CREST; January 8, 1950; 1400 GCT; 35°36'N, 112°06'W; sounding, 950 fm; wind, 270°, force 3; weather, overcast; sea, very rough; wire angle, 10°.												
0	11.61	33.40a)	5.29	0.84	0	11.61	33.40	5.29	0.84	25.44	255.1	0.000
10	11.63	33.37	5.23	0.90	10	11.63	33.37	5.23	0.90	25.41	258.1	0.026
29	11.62	33.37	5.02	1.04	20	11.62	33.37	5.18	0.97	25.41	258.0	0.052
59	9.93	33.57	3.53	2.02	30	11.61	33.37	5.02	1.06	25.41	258.2	0.077
89	9.30	33.64	3.17	2.26	50	10.45	33.52	3.80	1.82	25.72	229.1	0.126
118	8.90	33.75	2.85	2.45	75	9.58	33.61	3.32	2.18	25.99	204.3	0.180
177	8.08	33.95	2.95	2.52	100	9.14	33.67	3.00	2.34	26.08	196.5	0.230
234	7.26	34.02	1.73	3.01	150	8.45	33.88	2.90	2.51	26.35	171.4	0.322
291	6.74	34.09	1.52	3.30	200	7.72	33.99	2.21	2.68	26.54	153.3	0.404
346	5.80	34.04	1.42	3.50	250	7.10	34.05	1.65	3.12	26.68	141.1	0.477
454	5.30	33.95	0.73	3.92b)	300	6.62	34.09	1.52	3.34	26.78	132.6	0.546
569	5.11	34.25	0.39	4.02	400	5.50	33.98	1.08	3.72	26.83	127.6	0.676
680	4.84	34.34	0.35	4.02	500	5.22	34.08	0.54	3.98	26.94	118.0	0.798
797	4.32	34.38	0.44	3.99	600	5.07	34.29	0.36	4.02	27.13	101.6	0.908
910	4.01	34.38	0.62	3.88	700	4.77	34.35	0.35	4.02	27.21	94.6	1.004
1134	3.56	34.52	0.83	3.72	800	4.31	34.38	0.45	3.98	27.28	87.8	1.095
1349	3.13	34.49	0.94	3.87	1000	3.81	34.42	0.72	3.82	27.36	80.9	1.264
704K-1 (71.85) HORIZON; January 7, 1950; 1600 GCT; 34°54'N, 124°04'W; sounding, 2,530 fm; wind, 180°, force 4; weather, overcast; sea, very rough; wire angle, 11°.												
0	13.93	33.03	5.09	0.48	0	13.93	33.03	5.09	0.48	24.70	325.6	0.000
10	13.91	33.03	5.03	0.49	10	13.91	33.03	5.03	0.49	24.71	325.1	0.033
25	13.94	33.02	5.23	0.51	20	13.94	33.02	5.20	0.50	24.69	326.9	0.065
50	13.66	33.01	5.29	0.56	30	13.91	33.02	5.25	0.51	24.70	326.5	0.098
70	12.84	33.02	5.29	0.62	50	13.66	33.01	5.29	0.56	24.74	322.6	0.163
100	11.89	33.01	5.28	0.78	75	12.84	33.02	5.30	0.64	24.91	307.1	0.242
152	9.25	33.34	4.20	1.38	100	11.89	33.01	5.28	0.78	25.09	290.5	0.316
200	8.13	33.75	3.38	1.70	150	9.28	33.32	4.26	1.35	25.78	225.4	0.446
247	7.74	33.98	2.47	2.06	200	8.13	33.75	3.38	1.70	26.29	177.2	0.546
296	7.06	34.01	2.16	2.24c)	250	7.68	33.98	2.42	2.07	26.54	154.4	0.629
396	5.92	34.04	1.37	2.48	300	6.99	34.01	2.15	2.24	26.66	143.4	0.704
494	5.45	34.13	0.80	2.76	400	5.88	34.04	1.35	2.49	26.83	127.9	0.838
597	5.14	34.23	0.39	2.88	500	5.41	34.14	0.77	2.78	26.97	115.9	0.960
695	4.90	34.31	0.32	2.90	600	5.13	34.23	0.39	2.88	27.07	106.9	1.072
798	4.46	34.34	0.42	2.90	700	4.89	34.31	0.33	2.90	27.16	99.0	1.174
998	3.88	34.48	0.61	2.87	800	4.44	34.34	0.43	2.90	27.24	92.3	1.270
1203	3.42	34.51	0.77	2.88	1000	3.84	34.48	0.61	2.87	27.41	76.8	1.440

a) Salinity bottle numbers were not recorded on the data sheet. Since standard handling and titrating procedures were used, these salinity values are assumed to be in the order listed.

b) Alternate value, 3.56 μg at/L, not used in interpolation.

c) Alternate value, 2.12 μg at/L, not used in interpolation.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
HORIZON; January 7, 1950; 1800 GCT; 34°54'N, 124°04'W; sounding, 2,530 fm; wind, 180°, force 5; weather, overcast; sea, very rough; wire angle, 22°.													704K-2 (71.85)
0	13.92	32.99	5.38	0.46	0	13.92	32.99	5.38	0.46	24.67	328.2	0.000	
9	13.89	32.95	5.56	0.44	10	13.90	32.95	5.56	0.44	24.65	330.8	0.033	
23	13.94	32.88	5.31	0.46	20	13.95	32.89	5.35	0.46	24.59	336.5	0.066	
51	13.60	32.97	5.52	0.52	30	13.89	32.87	5.34	0.47	24.59	337.1	0.100	
74	12.99	32.95	5.45	0.67	50	13.62	32.97	5.52	0.52	24.72	325.0	0.166	
100	11.94	32.90	5.26	0.74	75	12.97	32.95	5.45	0.67	24.84	314.6	0.246	
148	9.20	33.33	4.34	1.32	100	11.94	32.90	5.26	0.74	24.99	299.8	0.323	
198	8.14	33.62	3.38	1.78	150	9.20	33.35	4.31	1.34	25.82	221.9	0.453	
246	7.74	33.82	2.53	2.08u	200	8.12	33.63	3.31	1.79	26.20	186.1	0.556	
296	7.17	33.96	2.24	2.12	250	7.69	33.83	2.49	1.98	26.42	165.6	0.643	
400	6.10	34.04	1.34	2.38	300	7.11	33.97	2.23	2.14	26.62	147.9	0.721	
500	5.47	34.00r	0.84	2.62a)	400	6.10	34.04	1.34	2.38	26.80	130.7	0.861	
604	5.10	34.31	0.39	2.77	500	5.47	34.12	0.84	2.62	26.94	118.2	0.985	
709	4.81	34.31	0.39	3.00	600	5.12	34.31	0.40	2.77	27.14	100.7	1.095	
810	4.38	34.29	0.38	2.97	700	4.83	34.31	0.40	2.99	27.17	98.3	1.194	
1017	3.81	34.43	0.63	2.99	800	4.45	34.29	0.40	3.01	27.20	96.1	1.291	
1220	3.33	34.34	0.78	2.96	1000	3.85	34.42	0.62	2.99	27.36	81.3	1.469	
HORIZON; January 7, 1950; 2000 GCT; 34°54'N, 124°04'W; sounding, 2,530 fm; wind, 180°, force 5; weather, cloudy; sea, very rough; wire angle, 34°.													704K-3 (71.85)
0	13.81	32.97	5.53	0.42	0	13.81	32.97	5.53	0.42	24.68	327.6	0.000	
9	13.77	33.04	5.19	0.42	10	13.79	33.04	5.20	0.42	24.74	322.0	0.032	
21	13.84	32.97	5.44	0.42	20	13.84	32.97	5.42	0.42	24.68	328.4	0.065	
45	13.76	32.94	5.57	0.46	30	13.84	32.96	5.51	0.43	24.67	329.5	0.098	
64	12.86	32.90	5.48	0.60	50	13.70	32.93	5.54	0.49	24.67	329.4	0.164	
88	12.48	33.03	5.42	0.66	75	12.67	32.96	5.46	0.64	24.90	308.2	0.244	
132	9.48	32.99	4.96	1.12	100	11.98	33.02	5.33	0.72	25.08	291.8	0.318	
175	8.66	33.62	4.06	1.48	150	9.10	33.29	4.60	1.30	25.79	224.8	0.448	
219	7.96	33.75	3.14	1.78	200	8.25	33.70	3.50	1.68	26.24	182.5	0.550	
263	7.44	33.84	2.68	1.98	250	7.58	33.82	2.80	1.93	26.43	164.8	0.636	
355	6.66	33.96	2.32	2.25	300	7.16	33.89	2.48	2.11	26.55	154.5	0.716	
445	5.78	33.96	1.11	2.53	400	6.16	33.96	1.99	2.39	26.74	137.3	0.862	
537	5.19	34.14	0.61	2.76b)	500	5.38	34.05	0.74	2.68	26.90	122.2	0.992	
631	4.91	34.14	0.42	2.78c)	600	4.97	34.15	0.48	2.78	27.03	110.8	1.108	
712	4.80	34.29	0.39	2.80	700	4.81	34.27	0.40	2.80	27.14	101.0	1.214	
916	4.14	34.31	0.50	2.78	800	4.55	34.30	0.42	2.80	27.20	96.5	1.313	
1111	3.61	34.36	0.74	2.72	1000	3.90	34.32	0.59	2.76	27.28	89.3	1.499	
HORIZON; January 7, 1950; 2200 GCT; 34°54'N, 124°04'W; sounding, 2,530 fm; wind, 180°, force 4; weather, cloudy; sea, rough; wire angle, 25°.													704K-4 (71.85)
0	13.81	32.97	5.39	0.44	0	13.81	32.97	5.39	0.44	24.68	327.5	0.000	
10	13.78	32.97	5.42	0.43	10	13.78	32.97	5.42	0.43	24.69	327.0	0.033	
28	13.81	32.99	5.50	0.44	20	13.79	32.98	5.48	0.44	24.69	326.7	0.065	
55	13.76	32.88	5.48	0.46	30	13.82	32.99	5.50	0.44	24.69	326.8	0.098	
82	12.00	32.95	5.15u	0.66	50	13.80	32.90	5.49	0.46	24.63	333.5	0.164	
109	10.75	32.95	5.37	0.83	75	13.15	32.93	5.40	0.58	24.78	319.0	0.246	
162	9.54	33.35	4.31	1.33	100	11.68	32.95	5.38	0.78	25.08	291.4	0.322	
216	7.96	33.62	3.36	1.74	150	9.90	33.21	4.60	1.22	25.59	243.3	0.455	
268	7.27	33.95	2.73	1.94	200	8.31	33.46	3.59	1.64	26.04	201.4	0.567	
321	6.84	33.93	2.33	2.20	250	7.47	33.86	2.94	1.87	26.48	160.3	0.657	
422	5.98	34.04	1.41	2.44	300	7.00	33.94	2.49	2.12	26.61	148.8	0.734	
533	5.33	34.07	0.77	2.69d)	400	6.18	34.01	1.60	2.39	26.77	134.0	0.876	
640	5.00	34.14	0.38	2.72	500	5.48	34.06	0.96	2.64	26.90	122.6	1.004	
752	4.58	34.40	0.38	2.72	600	5.10	34.10	0.49	2.72	26.97	116.0	1.124	
859	4.23	34.40	0.48	2.71	700	4.78	34.28	0.38	2.72	27.15	99.8	1.231	
1080	3.62	34.47	0.69	2.76	800	4.42	34.40	0.42	2.73	27.29	87.6	1.325	
1294	3.13	34.49	0.85	2.73	1000	3.81	34.44	0.64	2.72	27.38	79.4	1.492	

a) Alternate value, 2.72 μg at/L, not used in interpolation.
b) Alternate value, 2.61 μg at/L, not used in interpolation.
c) Alternate value, 2.66 μg at/L, not used in interpolation.
d) Alternate value, 2.59 μg at/L, not used in interpolation.

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

704K-5 (71.85) HORIZON; January 8, 1950; 0000 GCT; 34°54'N, 124°04'W; sounding, 2,530 fm; wind, 180°, force 5; weather, cloudy; sea, very rough; wire angle, 23°.

0	13.87	32.99	5.14	0.48	0	13.87	32.99	5.14	0.48	24.68	327.2	0.000
10	13.84	33.01	5.41	0.47	10	13.84	33.01	5.41	0.47	24.70	325.4	0.033
23	13.85	32.97	5.47	0.49	20	13.85	32.99	5.46	0.49	24.69	327.1	0.065
51	13.84	33.08	5.47	0.50	30	13.86	32.96	5.49	0.49	24.66	329.8	0.098
74	13.18	32.83	5.54	0.56	50	13.85	33.08	5.47	0.50	24.76	321.2	0.163
102	11.67	32.97	5.60	0.77	75	13.17	32.83	5.55	0.58	24.70	327.5	0.244
152	9.84	33.35	4.74	1.34	100	11.74	32.95	5.61	0.75	25.07	292.6	0.322
202	8.26	33.71	3.36	1.72	150	9.90	33.33	4.75	1.33	25.69	234.4	0.453
252	7.45	33.86	2.68	1.98	200	8.33	33.69	3.37	1.70	26.22	184.6	0.559
302	6.90	33.87	2.28	2.26	250	7.47	33.86	2.70	1.98	26.48	160.3	0.644
407	5.87	33.95	1.15	2.68a)	300	6.91	33.87	2.29	2.25	26.56	152.9	0.722
509	5.39	34.04	0.79	2.80b)	400	5.94	33.94	1.20	2.66	26.75	136.1	0.867
613	4.99	34.13	0.41	2.92	500	5.42	34.03	0.81	2.79	26.88	124.3	0.997
717	4.76	34.23	0.75r	2.92	600	5.03	34.12	0.44	2.91	27.00	113.7	1.116
818	4.38	34.42	0.39	2.94	700	4.79	34.21	0.38	2.92	27.10	105.0	1.226
1027	3.81	34.40	0.61	2.90	800	4.45	34.40	0.38	2.94	27.29	87.7	1.322
1230	3.27	34.56	0.76	2.90	1000	3.87	34.40	0.60	2.90	27.34	82.9	1.493

704K-6 (71.85) HORIZON; January 8, 1950; 0200 GCT; 34°54'N, 124°04'W; sounding, 2,530 fm; wind, 180°, force 5; weather, partly cloudy; sea, very rough; wire angle, 24°.

0	13.94	33.04	5.55	0.53	0	13.94	33.04	5.55	0.53	24.70	325.1	0.000
10	13.92	33.04	5.31	0.52	10	13.92	33.04	5.31	0.52	24.70	325.4	0.033
23	13.92	33.04	5.57	0.46	20	13.92	33.04	5.53	0.47	24.71	325.5	0.065
51	13.90	33.04	5.93	0.47	30	13.92	33.04	5.75	0.46	24.71	325.7	0.098
74	13.12	32.99	5.86	0.60	50	13.90	33.04	5.93	0.46	24.72	325.2	0.163
100	12.05	33.04	5.95	0.70	75	13.10	32.99	5.85	0.60	24.84	314.1	0.243
150	9.76	33.44	4.26	1.38	100	12.05	33.04	5.95	0.70	25.08	291.7	0.318
199	8.33	33.81	3.71	1.66	150	9.76	33.44	4.26	1.38	25.79	225.1	0.448
247	7.56	33.95	3.13	1.95	200	8.30	33.82	3.72	1.65	26.32	174.4	0.548
268p	7.16	33.99	3.04u	2.06	250	7.53	33.96	3.09	1.96	26.55	153.8	0.629
295	6.87	33.98	2.51	2.12	300	6.83	33.98	2.46	2.14	26.66	143.6	0.704
399p	6.16	34.06	1.27	2.46	400	6.16	34.06	1.25	2.47	26.81	129.9	0.840
520p	5.28	34.14	0.72	2.64	500	5.39	34.12	0.79	2.61	26.95	117.1	0.964
641p	4.96	34.31	0.40	2.80	600	5.05	34.27	0.50	2.76	27.11	102.9	1.074
761p	4.61	34.33	0.37	2.84	700	4.78	34.32	0.37	2.82	27.18	96.8	1.173
1003p	4.00	34.45	0.55	2.83	800	4.53	34.34	0.39	2.83	27.23	93.3	1.268
1208	3.35	34.51	0.70	2.84	1000	4.00	34.45	0.55	2.84	27.37	80.8	1.443

704K-7 (71.85) HORIZON; January 8, 1950; 0400 GCT; 34°54'N, 124°04'W; sounding, 2,530 fm; wind, 190°, force 6; weather, overcast; sea, very rough; wire angle, 24°.

0	13.93	33.01	5.16	0.44	0	13.93	33.01	5.16	0.44	24.69	326.6	0.000
10	13.88	33.01	5.50	0.42	10	13.88	33.01	5.50	0.42	24.70	326.1	0.033
23	13.91	33.03	5.35	0.46	20	13.90	33.03	5.36	0.44	24.71	325.3	0.065
50	13.68	32.99	5.49	0.53	30	13.91	33.03	5.36	0.48	24.71	325.8	0.098
72	13.52	32.99	5.25	0.54	50	13.68	32.99	5.49	0.53	24.72	324.8	0.163
99	11.62	33.01	5.48	0.71	75	13.44	32.99	5.25	0.55	24.77	320.7	0.244
149	9.82	33.40	4.30	1.34	100	11.62	33.01	5.48	0.72	25.14	286.1	0.319
199	8.39	33.82	3.14	1.78	150	9.81	33.40	4.25	1.35	25.76	227.9	0.448
248	7.48	33.97	2.80	2.03	200	8.38	33.82	3.14	1.78	26.31	175.6	0.549
298	6.77	33.98	2.41	2.16	250	7.44	33.97	2.79	2.02	26.57	151.7	0.630
405	5.94	34.08	1.11	2.57	300	6.78	33.98	2.39	2.17	26.67	142.8	0.705
509	5.30	34.14	0.64	2.73	400	5.97	34.07	1.14	2.54	26.84	126.8	0.839
613	4.92	34.25	0.37	2.80	500	5.35	34.13	0.69	2.72	26.97	115.9	0.960
719	4.69	34.33	0.33	2.88	600	4.95	34.24	0.40	2.79	27.10	104.0	1.070
820	4.46	34.39	0.39	2.88	700	4.73	34.31	0.32	2.87	27.18	97.0	1.170
1027	3.84	34.45	0.60	2.81	800	4.51	34.38	0.37	2.88	27.26	90.1	1.264
1229	3.29	34.51	0.77	2.78	1000	3.92	34.44	0.58	2.82	27.37	80.7	1.436

a) Alternate value, 2.56 μg at/L, not used in interpolation.
b) Alternate value, 2.70 μg at/L, not used in interpolation.

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

HORIZON; January 8, 1950; 0600 GCT; 34°54'N, 124°04'W; sounding, 2,530 fm; wind, 190°, force 6; weather, rain; sea, very rough; wire angle, 35°. 704K-8 (71.85)

0	13.86	32.97	5.00	0.43	0	13.86	32.97	5.00	0.43	24.67	328.3	0.000
8	13.82	32.92	5.10	0.46	10	13.82	32.92	5.12	0.46	24.64	331.5	0.033
20	13.86	32.90	5.19	0.52	20	13.86	32.90	5.19	0.52	24.61	334.2	0.066
45	13.75	33.03	5.19	0.52	30	13.85	32.91	5.20	0.52	24.63	333.3	0.100
66	13.33	32.92	5.39	0.60	50	13.70	33.03	5.20	0.54	24.75	322.1	0.165
90	11.63	32.90	5.20	0.68	75	12.65	32.91	5.36	0.62	24.87	311.5	0.244
110p	10.63	33.01	5.12	0.94	100	11.10	32.94	5.16	0.74	25.18	282.2	0.319
173p	9.30	33.53	3.55	1.66	150	9.74	33.34	4.20	1.50	25.72	231.2	0.447
236p	8.23	33.87	3.13	1.86	200	8.81	33.69	3.34	1.78	26.14	191.6	0.553

HORIZON; January 8, 1950; 1030 GCT; 34°54'N, 124°04'W; sounding, 2,530 fm; wind, 200°, force 7; weather, rain; sea, high; wire angle, 27°. 704K-9 (71.85)

0	13.69	32.99	5.42	0.46	0	13.69	32.99	5.42	0.46	24.72	323.8	0.000
10	13.77	33.01	5.45	0.48	10	13.77	33.01	5.45	0.48	24.71	324.8	0.032
27	13.67	32.97	5.49	0.48	20	13.74	32.99	5.49	0.48	24.71	325.2	0.065
54	13.67	33.04	5.36	0.50	30	13.67	32.97	5.49	0.48	24.71	325.5	0.098
80	12.53	33.04	5.50	0.68	50	13.65	33.03	5.37	0.50	24.76	321.2	0.162
107	10.34	32.97	5.34	0.95	75	13.15	33.04	5.50	0.61	24.87	311.5	0.241
115p	10.41	32.99	5.00	1.02	100	10.47	32.98	5.39	0.86	25.32	268.7	0.314
160	9.25	33.49	3.86	1.06r	150	9.45	33.39	4.02	1.41	25.81	222.9	0.437
174p	9.02	33.58	3.66	1.64	200	8.48	33.68	3.34	1.84	26.19	187.6	0.539
232p	7.91	33.77	3.01	1.94	250	7.70	33.81	2.85	1.98	26.41	167.3	0.628
334p	6.77	33.96	2.19	2.20	300	7.14	33.91	2.44	2.10	26.56	152.8	0.708
461p	5.74	34.00	0.96	2.59	400	6.17	33.99	1.50	2.43	26.76	135.3	0.852
579p	5.11	34.14	0.53	2.71	500	5.52	34.03	0.81	2.63	26.87	125.2	0.982
724p	4.70	34.23	0.36	2.86	600	5.03	34.16	0.50	2.73	27.03	110.8	1.100
851p	4.35	34.36	0.45	2.92	700	4.75	34.21	0.38	2.84	27.10	104.7	1.208
1290p	3.17	34.46	0.94	2.82	800	4.50	34.31	0.40	2.90	27.21	95.2	1.308
					1000	3.93	34.39	0.60	2.92	27.33	84.5	1.488

HORIZON; January 8, 1950; 1410 GCT; 34°54'N, 124°04'W; sounding, 2,530 fm; wind, 270°, force 4; weather, partly cloudy; sea, high; wire angle, 19°. 704K-10 (71.85)

0	13.67	33.05	5.21	0.46	0	13.67	33.05	5.21	0.46	24.77	318.6	0.000
8	13.64	33.05	5.48	0.46	10	13.66	33.05	5.53	0.46	24.77	318.9	0.032
22	13.68	33.05	5.72	0.53	20	13.68	33.05	5.70	0.51	24.77	319.5	0.064
51	13.67	33.05	5.42	0.55	30	13.69	33.05	5.70	0.54	24.77	319.9	0.096
74	13.67	33.05	5.20	0.54	50	13.67	33.05	5.47	0.56	24.77	320.1	0.160
102	11.55	32.99	5.63	0.76	75	13.67	33.05	5.21	0.54	24.77	320.7	0.240
153	9.60	33.52	4.05	1.45	100	11.70	32.99	5.64	0.74	25.11	288.9	0.316
204	8.20	33.84	3.49	1.70	150	9.65	33.50	4.10	1.43	25.86	218.0	0.443
254	7.50	33.94	2.76	2.03	200	8.30	33.82	3.54	1.69	26.32	174.4	0.541
304	6.72	33.98	2.21	2.22	250	7.56	33.94	2.84	2.01	26.53	155.6	0.623
412	5.86	34.09	1.21	2.76	300	6.78	33.98	2.25	2.20	26.67	142.8	0.698
516	5.29	34.18	0.70	2.81	400	5.92	34.08	1.31	2.70	26.86	125.5	0.832
619	5.02	34.27	0.42	2.82	500	5.37	34.17	0.76	2.82	27.00	113.2	0.951
724	4.76	34.36	0.36	2.92	600	5.06	34.25	0.46	2.82	27.10	104.5	1.061
825	4.41	34.42	0.41	2.88	700	4.83	34.34	0.38	2.91	27.20	96.0	1.160
1031	3.83	34.48	0.61	2.94	800	4.51	34.41	0.40	2.89	27.29	87.7	1.253
1230	3.32	34.52	0.83	2.96	1000	3.90	34.47	0.60	2.94	27.40	78.2	1.419

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

50.55 BLACK DOUGLAS; February 16, 1950; 2212 GCT; 39°30'N, 124°30'W; sounding, 1,160 fm; wind, 270°, force 2; weather, fog; sea, rough; wire angle, 8°.

0	11.56	32.84	-	0	11.56	32.84	(5.65)	25.02	295.5	0.000
10	11.38	32.84	5.67	10	11.38	32.84	5.67	25.05	292.4	0.029
25	10.46	32.88	5.68	20	10.65	32.86	5.69	25.19	279.1	0.058
50	10.20	32.90	5.64	30	10.36	32.89	5.70	25.27	272.2	0.086
74	9.48	33.02	5.60	50	10.20	32.90	5.64	25.30	269.2	0.140
98	9.10	33.37	4.45	75	9.50	33.03	5.59	25.52	248.9	0.204
153	8.18	33.84	2.51	100	9.06	33.39	4.37	25.87	216.0	0.263
201	7.70	33.98	2.25	150	8.22	33.82	2.55	26.33	172.7	0.360
298	6.88	34.07	1.40	200	7.71	33.97	2.25	26.53	154.7	0.441
396	5.97	34.14	0.79	250	7.31	34.03	1.84	26.63	145.4	0.517
490	5.46	34.18	0.56	300	6.87	34.07	1.35	26.73	137.2	0.587
588	5.02	34.22	0.47	400	5.93	34.14	0.77	26.90	121.3	0.716
780	4.37	34.38	0.30	500	5.41	34.18	0.54	27.00	113.0	0.833
972	3.82	34.45	0.50	600	4.97	34.23	0.45	27.09	104.9	0.942
1175	3.31	34.49	0.60	700	4.62	34.31	0.34	27.19	95.7	1.043
				800	4.31	34.39	0.30	27.29	87.1	1.134
				1000	3.75	34.46	0.51	27.40	77.2	1.299

50.60 BLACK DOUGLAS; February 17, 1950; 0225 GCT; 39°20'N, 124°52'W; sounding, 1,610 fm; wind, calm; weather, fog; sea, very rough; wire angle, 5°.

0	11.66	32.81	5.79	0	11.66	32.81	5.79	24.97	299.5	0.000
10	11.53	32.77	5.96	10	11.53	32.77	5.96	24.97	300.3	0.030
25	11.22	32.83	5.71	20	11.35	32.81	5.73	25.03	294.5	0.060
50	10.63	32.77	5.85	30	11.15	32.83	5.71	25.08	289.8	0.089
75	8.41	32.81	5.45	50	10.63	32.77	5.85	25.12	286.3	0.147
100	9.20	33.30	4.68	75	8.41	32.81	5.45	25.52	249.0	0.213
155	8.00	33.70	3.36	100	9.20	33.30	4.68	25.78	224.8	0.273
204	7.46	33.93	2.70	150	8.10	33.67	3.45	26.24	181.8	0.374
301	6.64	34.05	1.65	200	7.50	33.92	2.71	26.52	155.4	0.458
402	5.68	34.11	1.10	250	7.09	34.00	2.10	26.64	144.7	0.534
498	5.26	34.14	0.58	300	6.65	34.05	1.66	26.74	135.9	0.604
599	4.84	34.14	0.42	400	5.69	34.11	1.10	26.91	120.4	0.732
797	4.12	34.36	0.34	500	5.25	34.14	0.57	26.99	114.0	0.849
989	3.57	34.46	0.49	600	4.83	34.14	0.40	27.03	110.1	0.961
1189	3.19	34.51	0.66	700	4.45	34.23	0.34	27.15	99.7	1.066
				800	4.12	34.36	0.36	27.29	86.9	1.159
				1000	3.55	34.46	0.50	27.43	74.6	1.322

50.70 BLACK DOUGLAS; February 17, 1950; 0849, 0922 GCT; 39°00'N, 125°36'W; sounding, 2,100 fm; wind, 270°, force 1; weather, partly cloudy; sea, rough; wire angle, 7°, 7°.

0	11.92	32.81	5.93	0	11.92	32.81	5.93	24.92	304.1	0.000
10	11.91	32.77	5.84	10	11.91	32.77	5.84	24.90	306.8	0.030
24	11.69	32.84	5.96	20	11.76	32.80	5.94	24.95	302.1	0.061
48	10.13	32.94	4.85	30	11.35	32.87	5.95	25.08	290.1	0.091
73	8.97	32.97	5.10	50	10.00	32.94	4.85	25.37	263.1	0.146
98	8.82	33.33	4.50	75	8.95	32.98	5.08	25.57	244.3	0.209
152	7.98	33.78	3.54	100	8.79	33.35	4.47	25.88	214.9	0.267
202	7.44	33.91	2.57	150	8.02	33.77	3.58	26.33	173.4	0.364
				200	7.47	33.91	2.58	26.52	155.6	0.446
301	6.61	34.00	1.69	250	7.02	33.96	2.09	26.62	146.8	0.522
404	5.74	34.13	0.91	300	6.63	34.00	1.69	26.70	139.3	0.593
502	5.10	34.18	0.65	400	5.76	34.12	0.93	26.91	120.5	0.723
605	4.81	34.27	0.35	500	5.10	34.18	0.66	27.04	109.0	0.837
805	4.04	34.38	0.29	600	4.83	34.26	0.36	27.13	101.1	0.942
1000	3.58	34.40	0.51	700	4.45	34.34	0.32	27.24	91.4	1.039
1202	3.06	34.49	0.66	800	4.06	34.38	0.29	27.31	84.8	1.127
				1000	3.58	34.40	0.51	27.37	79.6	1.292

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OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
BLACK DOUGLAS; February 17, 1950; 1548 GCT; 38°40'N, 126°21'W; sounding, 2,380 fm; wind, calm; weather, partly cloudy; sea, slight; wire angle, 1°.													50.80
0	11.35	32.79	5.70		0	11.35	32.79	5.70		25.02	295.5	0.000	
10	11.00	32.72	5.75		10	11.00	32.72	5.75		25.02	295.7	0.029	
25	10.36	32.70	5.58		20	10.52	32.71	5.63		25.10	288.0	0.059	
50	10.26	32.70	5.78		30	10.32	32.70	5.58		25.13	285.6	0.087	
75	9.03	32.79	4.56		50	10.26	32.70	5.78		25.14	284.8	0.144	
100	8.72	33.30	5.47		75	9.03	32.79	4.56		25.40	259.8	0.212	
155	7.90	33.75	3.46		100	8.72	33.30	5.47		25.85	217.7	0.272	
204	7.43	33.95	2.63		150	7.97	33.72	3.58		26.30	176.2	0.371	
301	6.44	34.05	1.64		200	7.47	33.94	2.70		26.54	153.4	0.453	
404	5.68	34.13	0.96		250	6.95	34.01	2.09		26.67	142.2	0.527	
501	5.10	34.18	0.69		300	6.45	34.05	1.65		26.77	133.2	0.596	
603	4.74	34.27	0.46		400	5.73	34.13	0.98		26.92	119.5	0.722	
803	4.10	34.40	0.51		500	5.12	34.18	0.70		27.03	109.4	0.836	
998	3.60	34.47	0.53		600	4.75	34.27	0.45		27.15	99.2	0.941	
1201	3.17	34.54	0.74		700	4.43	34.34	0.49		27.24	91.2	1.036	
					800	4.11	34.40	0.50		27.32	83.9	1.124	
					1000	3.59	34.47	0.53		27.43	74.5	1.282	
BLACK DOUGLAS; February 17, 1950; 2131 GCT; 38°20'N, 127°05'W; sounding, 2,460 fm; wind, calm; weather, clear; sea, rough; wire angle, 6°.													50.90
0	12.02	32.79	5.70		0	12.02	32.79	5.70		24.89	307.5	0.000	
10	11.56	32.79	5.73		10	11.56	32.79	5.73		24.98	299.4	0.030	
25	11.09	32.79	5.79		20	11.22	32.79	5.77		25.04	293.8	0.060	
50	10.59	32.70	5.75		30	11.00	32.79	5.80		25.08	290.2	0.089	
74	10.15	32.72	5.72		50	10.59	32.70	5.75		25.08	290.6	0.147	
98	9.24	33.12	4.77		75	10.15	32.72	5.70		25.17	282.3	0.219	
152	8.02	33.69	3.40		100	9.21	33.14	4.72		25.65	236.7	0.284	
201	7.52	33.95	2.52		150	8.08	33.66	3.40		26.23	182.3	0.388	
299	6.62	34.04	1.77		200	7.55	33.95	2.53		26.54	153.9	0.472	
400	5.68	34.07	1.12		250	7.07	34.02	2.09		26.66	143.0	0.547	
497	5.05	34.14	0.86		300	6.61	34.04	1.76		26.74	136.1	0.616	
599	4.68	34.25	0.50		400	5.68	34.07	1.12		26.88	123.1	0.746	
797	4.10	34.34	0.48		500	5.03	34.14	0.85		27.01	111.4	0.863	
992	3.54	34.43	0.53		600	4.67	34.25	0.50		27.14	99.7	0.969	
1194	3.16	34.51	0.67		700	4.37	34.30	0.49		27.21	93.4	1.065	
					800	4.09	34.34	0.48		27.28	88.0	1.156	
					1000	4.03	34.43	0.55		27.35	82.7	1.326	
BLACK DOUGLAS; February 18, 1950; 0530 GCT; 38°00'N, 127°49'W; sounding, 2,500 fm; wind, calm; weather, partly cloudy; sea, moderate; wire angle, 4°.													50.100
0	12.14	32.86			0	12.14	32.86			24.92	304.4	0.000	
10	12.13	32.86			10	12.13	32.86			24.92	304.5	0.030	
25	11.46	32.79			20	11.75	32.83			24.97	299.9	0.061	
50	11.06	32.74			30	11.36	32.77			25.00	297.7	0.090	
75	9.64	32.80			50	11.06	32.74			25.03	295.3	0.150	
100	8.88	33.23			75	9.64	32.80			25.31	268.4	0.220	
153	8.02	33.74			100	8.88	33.23			25.78	224.9	0.282	
203	7.49	33.96			150	8.06	33.72			26.28	177.5	0.383	
301	6.42	34.01			200	7.51	33.96			26.55	152.6	0.465	
404	5.50	34.05			250	7.00	33.99			26.65	144.3	0.540	
501	5.01	34.11			300	6.45	34.01			26.74	136.1	0.609	
603	4.70	34.23			400	5.55	34.05			26.88	123.1	0.739	
803	4.08	34.36			500	5.03	34.11			26.99	113.5	0.857	
1000	3.48	34.45			600	4.72	34.22			27.11	102.7	0.965	
1204	3.04	34.51			700	4.40	34.31			27.22	93.1	1.063	
					800	4.10	34.36			27.29	86.7	1.153	
					1000	3.48	34.45			27.42	74.9	1.314	

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

50.110 BLACK DOUGLAS; February 18, 1950; 1200 GCT; 37°40'N, 128°33'W; sounding, 2,580 fm; wind, 200°, force 3; weather, clear; sea, moderate; wire angle, 12°.

0	11.38	32.68	0	11.38	32.68	24.92	304.1	0.000
10	11.23	32.70	10	11.23	32.70	24.97	300.1	0.030
24	11.15	32.71	20	11.18	32.71	24.98	298.9	0.060
48	10.91	32.72	30	11.10	32.71	25.00	297.8	0.090
73	10.36	32.71	50	10.88	32.72	25.05	293.7	0.149
97	8.96	32.92	75	10.25	32.71	25.15	284.5	0.221
151	8.08	33.60	100	8.86	32.96	25.57	244.7	0.288
199	7.61	33.90	150	8.10	33.59	26.17	187.8	0.396
295	6.68	34.01	200	7.59	33.90	26.49	158.2	0.482
396	5.90	34.11	250	7.11	33.96	26.61	148.0	0.558
491	5.04	34.13	300	6.63	34.01	26.71	138.6	0.630
591	4.98	34.24	400	5.85	34.11	26.89	122.4	0.761
786	4.26	34.37	500	5.02	34.13	27.01	112.0	0.878
980	3.67	34.47	600	4.96	34.25	27.11	103.3	0.986
1182	3.14	34.52	700	4.59	34.32	27.21	94.6	1.085
			800	4.21	34.38	27.30	86.7	1.175
			1000	3.63	34.48	27.43	74.6	1.336

50.120 BLACK DOUGLAS; February 18, 1950; 1858 GCT; 37°20'N, 129°16.5'W; sounding, 2,600 fm; wind, 200°, force 3; weather, missing; sea, slight; wire angle, 6°.

0	12.84	32.77	0	12.84	32.77	24.72	323.7	0.000
10	12.84	32.77	10	12.84	32.77	24.72	323.9	0.032
25	12.71	32.79	20	12.76	32.78	24.74	321.7	0.065
50	12.23	32.77	30	12.61	32.79	24.78	318.7	0.097
75	11.91	32.81	50	12.23	32.77	24.84	313.8	0.160
100	10.88	32.86	75	11.91	32.81	24.92	305.8	0.237
154	8.39	33.31	100	10.88	32.86	25.15	284.8	0.311
203	7.79	33.75	150	8.47	33.28	25.88	216.1	0.436
226p	7.65u	33.91u	200	7.83	33.73	26.32	174.4	0.534
339p	6.42	33.98	250	7.36	33.88	26.51	157.3	0.617
445p	5.42	34.05	300	6.84	33.95	26.64	145.9	0.693
553p	5.02	34.16	400	5.78	34.02	26.83	128.0	0.829
760p	4.32	34.33	500	5.19	34.10	26.96	116.0	0.951
958p	3.72	34.45	600	4.88	34.20	27.08	106.0	1.062
1157p	3.16	34.51	700	4.52	34.28	27.18	96.7	1.163
			800	4.20	34.36	27.28	88.0	1.256
			1000	3.60	34.47	27.43	74.7	1.419

50.130 BLACK DOUGLAS; February 19, 1950; 0251, 0330 GCT; 37°00'N, 130°00'W; sounding, 2,760 fm; wind, 340°, force 6; weather, overcast; sea, very rough; wire angle, 19°, 16°.

0	13.38	32.90	0	13.38	32.90	24.71	324.4	0.000
9	13.39	32.90	10	13.40	32.90	24.71	325.0	0.032
23	13.37	32.92	20	13.39	32.92	24.73	323.5	0.065
52	13.11	32.92	30	13.32	32.92	24.74	322.5	0.097
75	13.23	32.94	50	13.11	32.92	24.78	318.9	0.161
104	11.00	32.95	75	13.23	32.94	24.77	320.4	0.241
156	8.79	33.26	100	11.35	32.95	25.14	285.7	0.317
208	7.87	33.77	150	8.96	33.20	25.74	229.5	0.446
310	-	33.96	200	8.00	33.73	26.30	176.8	0.548
419	5.48	34.04	250	(7.32)	33.88	(26.51)	(156.7)	(0.631)
528	4.81	34.16	300	(6.70)	33.95	(26.66)	(143.8)	(0.706)
			400	(5.64)	34.03	(26.85)	(125.8)	(0.840)
631	4.61	34.22	500	4.94	34.13	27.01	110.9	(0.959)
834	3.98	34.34	600	4.67	34.20	27.10	103.5	(1.066)
1039	3.46	-	700	4.42	34.26	27.18	96.9	(1.166)
1242	3.04	34.52	800	4.09	34.32	27.26	89.5	(1.259)
			1000	3.54	34.42	27.39	77.7	(1.427)

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
BLACK DOUGLAS; February 16, 1950; 1318 GCT; 38°28'N, 124°14'W; sounding, 1,960 fm; wind, 260°, force 2; weather, continuous moderate rain; sea, rough; wire angle, 15°.													55.60
0	11.17	32.67	5.78		0	11.17	32.67	5.78		24.96	301.1	0.000	
9	11.16	32.86	5.70		10	11.15	32.86	5.70		25.10	287.3	0.029	
23	11.05	32.81	5.69		20	11.08	32.82	5.70		25.09	289.1	0.058	
48	10.79	32.83	5.50		30	10.97	32.81	5.66		25.10	288.2	0.087	
72	9.54	33.05	5.32		50	10.78	32.84	5.48		25.16	283.2	0.144	
96	8.98	33.31	4.48		75	9.43	33.09	5.25		25.58	243.5	0.211	
135p	8.66	33.64	3.31		100	8.93	33.35	4.41		25.86	217.1	0.268	
149	8.50	33.80	2.88		150	8.50	33.80	2.85		26.28	178.1	0.367	
197	8.22	34.01	2.09		200	8.20	34.01	2.08		26.49	158.8	0.451	
242p	7.92	34.02	1.91		250	7.85	34.02	1.86		26.55	154.0	0.530	
335p	6.74	34.09	1.35		300	7.21	34.05	1.52		26.66	143.3	0.604	
436p	5.82	34.14	0.95		400	6.09	34.12	1.07		26.87	124.4	0.737	
635p	4.99	34.31	0.40		500	5.52	34.18	0.72		26.98	114.5	0.857	
829p	4.30	34.40	0.39		600	5.12	34.28	0.43		27.11	103.1	0.966	
1031p	3.70	34.48	0.60		700	4.73	34.35	0.38		27.21	94.0	1.064	
					800	4.38	34.39	0.37		27.28	87.9	1.155	
					1000	3.78	34.47	0.53		27.41	76.6	1.320	
BLACK DOUGLAS; February 15, 1950; 2131 GCT; 37°37'N, 123°37'W; sounding, 1,840 fm; wind, 360°, force 1; weather, partly cloudy; sea, very rough; wire angle, 4°.													60.60
0	11.29	33.24	5.84		0	11.29	33.24	5.84		25.37	261.3	0.000	
10	10.95	33.28	5.95		10	10.95	33.28	5.95		25.46	253.3	0.026	
25	10.78	33.24	5.65		20	10.80	33.26	5.87		25.48	251.9	0.051	
50	10.75	33.22	5.67		30	10.76	33.23	5.65		25.46	253.7	0.076	
75	9.82	33.35	4.51		50	10.75	33.22	5.67		25.45	254.8	0.127	
100	9.26	33.75	3.17		75	9.82	33.35	4.51		25.71	230.4	0.188	
154	8.64	34.00	2.48		100	9.26	33.75	3.17		26.12	192.3	0.240	
202	8.10	34.07	2.37		150	8.68	33.99	2.50		26.40	166.5	0.330	
300	6.89	34.13	1.25		200	8.12	34.07	2.38		26.55	153.3	0.411	
401	6.03	34.20	0.83		250	7.55	34.10	1.73		26.65	143.7	0.484	
497	5.44	34.22	0.55		300	6.89	34.13	1.25		26.77	133.3	0.554	
598	4.88	34.23	0.47		400	6.05	34.20	0.82		26.94	118.1	0.679	
796	4.26	34.45	0.44		500	5.43	34.22	0.55		27.03	110.3	0.794	
991	3.74	34.52	1.06r		600	4.87	34.23	0.46		27.10	103.6	0.901	
1195	3.34	34.52	0.71		700	4.51	34.34	0.42		27.23	92.1	0.999	
					800	4.25	34.46	0.44		27.35	81.3	1.085	
					1000	3.72	34.52	0.56		27.46	72.4	1.239	
BLACK DOUGLAS; February 15, 1950; 1548 GCT; 37°17'N, 124°21'W; sounding, 2,200 fm; wind, 250°, force 1; weather, cloudy; sea, very rough; wire angle, 4°.													60.70
0	10.89	33.13	5.75		0	10.89	33.13	5.75		25.36	262.8	0.000	
10	10.98	33.13	5.70		10	10.98	33.13	5.70		25.35	264.3	0.026	
25	10.61	33.13	5.78		20	10.80	33.13	5.78		25.38	261.5	0.053	
50	10.33	33.19	5.47		30	10.54	33.14	5.78		25.43	256.8	0.078	
75	9.45	33.48	4.25		50	10.33	33.19	5.47		25.51	249.5	0.129	
100	8.76	33.64	3.46		75	9.45	33.48	4.25		25.88	215.2	0.187	
155	7.90	33.93	2.55		100	8.76	33.64	3.46		26.11	192.9	0.238	
204	7.37	34.04	2.25		150	7.96	33.91	2.60		26.45	161.9	0.327	
302	6.56	34.13	1.19		200	7.42	34.03	2.30		26.62	146.2	0.404	
404	5.68	34.15	0.73		250	6.97	34.10	1.69		26.74	135.7	0.474	
500	5.31	34.25	0.45		300	6.58	34.13	1.21		26.81	128.9	0.541	
601	4.88	34.30	0.32		400	5.69	34.15	0.73		26.94	117.5	0.664	
798	4.19	34.42	0.39		500	5.31	34.25	0.45		27.07	106.6	0.776	
990	3.66	34.45	0.53		600	4.88	34.30	0.33		27.16	98.5	0.879	
1191	3.20	34.50	0.70		700	4.51	34.36	0.35		27.25	90.7	0.973	
					800	4.18	34.42	0.40		27.33	83.2	1.060	
					1000	3.64	34.45	0.55		27.41	76.5	1.220	

60.80 BLACK DOUGLAS; February 15, 1950; 0938 GCT; 36°57'N, 125°04'W; sounding, 2,380 fm; wind, 260°, force 2; weather, clear; sea, rough; wire angle, 15°.

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
0	11.72	33.00	5.90		0	11.72	33.00	5.90		25.11	286.6	0.000
10	11.78	32.99	5.72		10	11.78	32.99	5.72		25.09	288.3	0.029
25	11.37	32.99	5.92		20	11.59	32.99	5.90		25.13	285.3	0.057
48	11.15	33.03	5.78		30	11.30	33.00	5.92		25.19	279.7	0.086
72	10.22	33.26	5.35		50	11.12	33.04	5.75		25.25	274.2	0.141
96	9.42	33.42	5.07		75	10.10	33.28	5.31		25.61	240.1	0.205
147	8.58	33.89	2.67		100	9.34	33.45	4.95		25.87	216.0	0.262
194	7.80	33.98	2.42		150	8.51	33.90	2.63		26.35	170.9	0.359
288	6.76	34.08	1.58		200	7.72	33.99	2.36		26.54	153.4	0.440
386	5.84	34.12	0.97		250	7.13	34.05	1.94		26.67	141.5	0.514
480	5.48	34.19	0.63		300	6.61	34.09	1.47		26.78	132.4	0.582
578	4.72	34.23	0.54		400	5.77	34.13	0.91		26.92	120.0	0.708
770	4.12	34.38	0.29		500	5.36	34.20	0.60		27.02	110.8	0.824
959	3.66	34.47	0.51		600	4.61	34.24	0.50		27.14	99.9	0.929
1156	3.28	34.52	0.78		700	4.29	34.31	0.35		27.23	91.8	1.025
					800	4.05	34.40	0.30		27.33	83.2	1.112
					1000	3.57	34.48	0.57		27.44	73.5	1.270

60.90 BLACK DOUGLAS; February 15, 1950; 0315 GCT; 36°37'N, 125°47'W; sounding, 2,460 fm; wind, 240°, force 1; weather, cloudy; sea, very rough; wire angle, 2°.

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
0	11.65	33.03	6.36		0	11.65	33.03	6.36		25.15	283.1	0.000
10	11.38	33.01	5.78		10	11.38	33.01	5.78		25.18	279.8	0.028
25	11.25	33.04	6.51		20	11.30	33.03	6.48		25.21	277.2	0.056
50	10.27	33.10	5.57		30	11.16	33.05	6.48		25.25	273.8	0.084
75	9.48	33.44	4.41		50	10.27	33.10	5.57		25.45	255.6	0.186
100	8.82	33.71	3.23		75	9.48	33.44	4.41		25.83	219.8	0.196
154	7.92	33.90	2.48		100	8.82	33.71	3.23		26.16	188.7	0.247
203	7.54	34.00	2.01		150	7.98	33.90	2.53		26.43	162.7	0.335
300	6.64	34.05	1.36		200	7.56	33.99	2.03		26.57	151.1	0.414
402	5.76	-	0.85		250	7.12	34.03	1.68		26.66	142.9	0.487
500	5.26	34.20	0.55		300	6.64	34.05	1.36		26.74	135.9	0.556
602	4.78	34.28	0.45		400	5.78	34.12	0.85		26.91	120.8	0.684
802	4.14	34.42	0.39		500	5.26	34.20	0.55		27.03	109.4	0.799
996	3.52	34.45	0.65		600	4.81	34.28	0.45		27.15	99.4	0.905
1197	3.10	34.49	0.82		700	4.46	34.35	0.40		27.24	90.8	1.000
					800	4.14	34.42	0.40		27.33	82.9	1.086
					1000	3.52	34.45	0.65		27.42	75.2	1.244

60.100 BLACK DOUGLAS; February 14, 1950; 2104 GCT; 36°17'N, 126°30'W; sounding, 2,500 fm; wind, 270°, force 2; weather, partly cloudy; sea, very rough; wire angle, 2°.

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
0	11.68	31.81	6.21		0	11.68	31.81	6.21		24.20	373.7	0.000
10	11.42	32.17	5.87		10	11.42	32.17	5.87		24.53	342.4	0.036
25	11.33	32.01	5.84		20	11.35	32.05	5.85		24.44	350.3	0.070
50	11.21	33.09	5.84		30	11.30	32.08	5.85		24.47	347.5	0.105
75	9.39	33.48	4.02		50	11.21	33.09	5.84		25.27	272.2	0.167
100	8.67	33.64	3.35		75	9.39	33.48	4.02		25.89	213.9	0.228
155	7.92	33.93	2.30		100	8.67	33.64	3.35		26.13	191.6	0.279
204	7.55	34.04	2.01		150	7.99	33.91	2.34		26.44	162.5	0.342
303	6.75	34.09	1.15		200	7.57	34.03	2.05		26.60	148.4	0.420
406	5.70	34.11	0.85		250	7.19	34.07	1.53		26.68	140.7	0.492
504	5.19	34.20	0.51		300	6.75	34.09	1.16		26.76	134.3	0.561
606	4.74	34.27	0.43		400	5.75	34.11	0.87		26.90	121.1	0.688
806	4.10	34.40	0.42		500	5.22	34.19	0.54		27.03	109.9	0.804
1002	3.60	34.44	0.59		600	4.76	34.26	0.42		27.14	100.6	0.910
1205	3.11	34.44	0.82		700	4.40	34.34	0.42		27.24	90.8	1.004
					800	4.12	34.39	0.42		27.31	84.9	1.093
					1000	3.62	34.44	0.60		27.40	77.2	1.255

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

BLACK DOUGLAS; February 14, 1950; 1503 GCT; 35°57'N, 127°12'W; sounding, 2,610 fm; wind, 160°, force 1; weather, cloudy; sea, very rough; wire angle, 8°. 60.110

0	11.76	32.90	6.24	0	11.76	32.90	6.24	25.03	294.5	0.000
10	11.78	32.94	6.34	10	11.78	32.94	6.34	25.05	291.8	0.029
25	11.35	32.97	5.51	20	11.58	32.96	6.00	25.10	287.4	0.058
50	10.51	32.92	5.88	30	11.11	32.97	5.53	25.20	279.1	0.087
75	10.06	33.24	5.66	50	10.51	32.92	5.88	25.26	273.1	0.142
99	8.94	33.49	4.03	75	10.06	33.24	5.66	25.59	242.0	0.206
153	7.97	33.82	3.05	100	8.90	33.50	4.00	25.98	205.6	0.262
202	7.56	33.96	2.31	150	8.01	33.81	3.10	26.36	170.3	0.356
299	6.56	34.04	-	200	7.58	33.96	2.35	26.54	153.5	0.437
402	5.86	34.09	0.99	250	7.07	34.01	1.89	26.65	143.7	0.511
498	5.40	34.21	0.66	300	6.56	34.04	1.55	26.74	135.3	0.581
599	4.96	34.26	0.35	400	5.89	34.09	0.99	26.87	124.2	0.711
796	4.16	34.39	-	500	5.40	34.21	0.65	27.02	110.6	0.828
989	3.58	34.45	0.48	600	4.95	34.26	0.35	27.12	102.2	0.934
1187	3.14	34.52	0.75	700	4.52	34.33	0.35	27.22	93.0	1.032
				800	4.15	34.39	0.36	27.31	85.0	1.121
				1000	3.55	34.45	0.50	27.42	75.4	1.282

BLACK DOUGLAS; February 14, 1950; 0816 GCT; 35°37'N, 127°54.5'W; sounding, 2,550 fm; wind, 160°, force 1; weather, overcast; sea, moderate; wire angle, 9°. 60.120

0	13.38	32.92	5.72	0	13.38	32.92	5.72	24.73	323.1	0.000
10	13.40	32.92	5.57	10	13.40	32.92	5.57	24.73	323.6	0.032
25	12.95	32.84	5.78	20	13.15	32.86	5.66	24.73	323.3	0.065
49	12.63	32.84	5.86	30	12.89	32.83	5.80	24.76	320.8	0.097
73	12.30	32.92	5.60	50	12.63	32.85	5.84	24.82	315.0	0.160
97	11.12	32.94	5.44	75	12.28	32.93	5.57	24.95	303.2	0.238
150	8.60	33.46	4.44	100	11.02	32.95	5.38	25.20	280.1	0.311
198	8.09	33.84	4.27	150	8.60	33.46	4.44	25.99	205.0	0.432
293	6.88	33.98	2.39	200	8.06	33.85	4.25	26.38	168.5	0.525
392	6.03	34.05	1.28	250	7.38	33.94	3.25	26.56	153.0	0.605
486	5.44	34.13	0.79	300	6.80	33.98	2.30	26.66	143.2	0.680
585	4.70	34.18	0.62	400	5.99	34.06	1.22	26.84	127.7	0.814
780	4.11	34.50u	0.38	500	5.33	34.14	0.75	26.98	115.0	0.936
972	3.62	-	0.41	600	4.64	(34.19)	0.61	(27.10)	(103.9)	(1.046)
1174	3.18	34.43u	0.59	700	4.32		0.46			
				800	4.06		0.37			
				1000	3.56		0.44			

BLACK DOUGLAS; February 14, 1950; 0155 GCT; 35°17'N, 128°37'W; sounding, 2,560 fm; wind, 240°, force 2; weather, partly cloudy; sea, moderate; wire angle, 4°. 60.130

0	14.06	33.04	5.72	0	14.06	33.04	5.72	24.68	327.1	0.000
10	14.10	33.08	5.73	10	14.10	33.08	5.73	24.71	325.4	0.033
25	14.04	33.08	5.63	20	14.07	33.08	5.65	24.71	325.2	0.065
50	14.03	33.08	5.72	30	14.03	33.08	5.64	24.72	324.6	0.098
75	14.05	33.09	5.65	50	14.03	33.08	5.72	24.72	325.0	0.163
100	12.08	32.95	5.77	75	14.05	33.09	5.65	24.72	325.4	0.244
155	9.00	33.19	5.10	100	12.08	32.95	5.77	25.00	298.8	0.322
204	8.18	33.69	4.57	150	9.13	33.15	5.15	25.67	235.6	0.455
301	7.11	33.96	3.23	200	8.23	33.66	4.62	26.21	185.4	0.561
403	5.93	-	1.37	250	7.67	33.87	3.95	26.46	162.3	0.648
499	5.14	34.07	1.02	300	7.12	33.96	3.23	26.61	148.8	0.725
601	4.82	34.22	0.60	400	5.96	34.02	1.41	26.81	130.4	0.865
798	4.02	34.34	0.35	500	5.13	34.07	1.02	26.95	117.6	0.989
994	3.62	34.47	0.47	600	4.83	34.22	0.62	27.10	104.1	1.100
1197	3.15	34.51	0.66	700	4.38	34.29	0.41	27.20	94.2	1.199
				800	4.02	34.34	0.35	27.28	87.3	1.290
				1000	3.61	34.47	0.48	27.43	74.9	1.452

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

61.55 BLACK DOUGLAS; February 16, 1950; 0203 GCT; 37°37'N, 123°07.5'W; sounding, 520 fm; wind, 260°, force 1; weather, cloudy; sea, very rough; wire angle, 7°.

0	11.16	32.94	6.71	0	11.16	32.94	6.71	25.17	281.0	0.000
10	10.81	33.22	5.81	10	10.81	33.22	5.81	25.45	254.8	0.027
25	10.74	33.28	5.59	20	10.76	33.26	5.65	25.48	251.3	0.052
50	10.80	33.49	5.45	30	10.74	33.31	5.57	25.53	247.6	0.077
75	9.82	33.66	3.74	50	10.80	33.49	5.45	25.66	235.6	0.125
100	9.37	33.71	3.25	75	9.82	33.66	3.74	25.95	207.6	0.181
149	8.64	33.92	2.45	100	9.37	33.71	3.25	26.07	197.1	0.231
198	8.10	34.05	1.90	150	8.64	33.92	2.40	26.35	171.2	0.323
295	6.79	34.13	1.41	200	8.06	34.05	1.89	26.54	153.8	0.405
391	6.07	34.20	0.93	250	7.36	34.10	1.63	26.68	140.9	0.478
485	5.67	34.27	0.59	300	6.75	34.13	1.39	26.79	131.4	0.546
578	5.11	34.28	0.41	400	6.04	34.21	0.89	26.95	117.3	0.670
672	4.86	34.34	0.51	500	5.60	34.27	0.53	27.05	108.6	0.784
765	4.46	34.38	0.43	600	5.03	34.29	0.43	27.13	101.3	0.889
860	4.26	34.42	0.47	700	4.75	34.35	0.51	27.21	94.2	0.987
				800	4.37	34.39	0.43	27.29	87.7	1.078

65.60 BLACK DOUGLAS; February 8, 1950; 1752 GCT; 36°45'N, 123°00'W; sounding, 1,670 fm; wind, 320°, force 1; weather, cloudy; sea, rough; wire angle, 0°.

0	11.09	33.49	5.40	0	11.09	33.49	5.40	25.60	239.8	0.000
10	11.04	33.47	5.41	10	11.04	33.47	5.41	25.60	240.5	0.024
25	10.89	33.48	5.44	20	10.92	33.48	5.43	25.63	237.8	0.048
50	10.88	33.46	5.34	30	10.87	33.48	5.43	25.64	237.0	0.072
75	10.57	33.62	4.28	50	10.88	33.46	5.34	25.62	237.9	0.119
100	9.74	33.73	3.03	75	10.57	33.62	4.28	25.79	223.2	0.177
154	8.86	33.89	2.36	100	9.74	33.73	3.03	26.02	201.7	0.230
203	8.00	34.02	2.37	150	8.94	33.88	2.37	26.27	178.8	0.325
301	7.21	34.14	1.43	200	8.04	34.02	2.38	26.52	155.9	0.409
403	6.42	34.20	0.70	250	7.59	34.09	1.93	26.65	143.9	0.484
499	5.60	34.18	0.52	300	7.22	34.14	1.44	26.73	137.0	0.554
599	4.95	34.23	0.39	400	6.45	34.20	0.71	26.89	123.4	0.684
796	4.30	34.38	0.38	500	5.60	34.18	0.52	26.98	115.3	0.803
992	3.80	-	0.49	600	4.94	34.23	0.39	27.09	104.5	0.914
1195	3.36	34.52	0.73	700	4.55	34.30	0.35	27.20	95.5	1.013
				800	4.30	34.38	0.36	27.28	87.7	1.105
				1000	3.78	34.47	0.49	27.41	76.7	1.270

70.55 BLACK DOUGLAS; February 9; 1950; 0310 GCT; 36°03'N, 122°02'W; sounding, 800 fm; wind, 320°, force 4; weather, cloudy; sea, moderate; wire angle, 27°.

0	11.02	33.28	5.44	0	11.02	33.28	5.44	25.46	253.6	0.000
8	11.00	33.30	5.81	10	11.01	33.30	5.80	25.47	252.3	0.025
22	11.06	33.31	5.73	20	11.05	33.31	5.73	25.47	252.3	0.050
45	11.02	33.46	5.39	30	11.05	33.33	5.65	25.49	251.3	0.076
67	10.34	33.51	4.38	50	10.98	33.48	5.26	25.62	239.2	0.125
90	9.47	33.62	3.12	75	10.00	33.54	3.75	25.83	219.2	0.182
139	8.70	33.87	2.53	100	9.22	33.69	2.94	26.08	196.3	0.234
183	8.36	33.95	2.26	150	8.60	33.90	2.48	26.34	172.0	0.326
273	7.67	34.16	1.30	200	8.24	33.98	2.00	26.46	161.7	0.410
366	6.73	34.20	0.87	250	7.90	34.12	1.43	26.62	147.2	0.487
455	5.95	34.27	0.44	300	7.38	34.18	1.21	26.74	136.1	0.557
549	5.49	34.29	0.43	400	6.41	34.22	0.60	26.91	121.4	0.686
733	4.67	34.43	0.36	500	5.69	34.28	0.42	27.04	109.0	0.801
916	4.04	34.45	0.26	600	5.30	34.32	0.40	27.12	102.3	0.908
1114	3.60	34.49	0.71	700	4.81	34.41	0.38	27.25	88.7	1.002
				800	4.39	34.44	0.33	27.32	84.2	1.089
				1000	3.84	34.47	0.39	27.40	77.5	1.251

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OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
CREST; February 2, 1950; 1300, 1318, 1334 GCT; 35°53'N, 122°23'W; sounding, 1,425 fm; wind, 290°, force 1; weather, partly cloudy; sea, rough; wire angle, 4°, 4°, 4°.													70.60
0	10.81	33.31	5.79	0.64	0	10.81	33.31	5.79	0.64	25.51	248.1	0.000	
10	10.79	33.30	5.56r	0.65	10	10.79	33.30	5.79	0.65	25.51	248.6	0.025	
25	10.80	33.30	5.75	0.64	20	10.80	33.30	5.76	0.65	25.51	248.9	0.050	
50	10.25	33.35	4.84	1.10	30	10.81	33.30	5.67	0.64	25.51	249.4	0.075	
75	8.85	33.53	3.61	1.53r	50	10.25	33.35	4.84	1.10	25.65	236.5	0.123	
100	8.44	33.68	3.08	1.57	75	8.85	33.53	3.61	1.40	26.01	202.0	0.178	
					100	8.44	33.68	3.08	1.57	26.19	185.2	0.226	
154	8.27	34.02	2.31	2.01r	150	8.30	34.01	2.32	1.80	26.47	159.5	0.312	
204	7.46	34.04	2.18	2.03	200	7.53	34.04	2.19	2.01	26.61	147.0	0.389	
					250	6.75	34.04	1.95	2.20	26.72	137.3	0.460	
303	6.34	34.05	1.55	2.35	300	6.35	34.05	1.57	2.35	26.78	131.9	0.528	
408	6.00	34.20	0.71	2.54	400	6.03	34.19	0.74	2.54	26.93	118.6	0.653	
507	5.22	34.22	0.48	2.54	500	5.28	34.22	0.49	2.54	27.05	108.3	0.767	
611	4.69	34.36	0.39	2.66	600	4.72	34.35	0.40	2.66	27.22	93.0	0.867	
816	4.35	34.43	0.45	2.66	700	4.58	34.40	0.40	2.67	27.27	88.5	0.958	
1015	3.76	34.45	0.57	2.63	800	4.39	34.42	0.44	2.66	27.31	85.7	1.045	
1219	3.24	34.54	0.78	2.58	1000	3.80	34.45	0.56	2.64	27.39	78.5	1.209	
BLACK DOUGLAS; February 3, 1950; 0117 GCT; 35°53'N, 122°23'W; sounding, 1,705 fm; wind, 190°, force 1; weather, partly cloudy; sea, moderate; wire angle, 8°.													70.60
0	11.13	33.31	4.91		0	11.13	33.31	4.91		25.46	253.6	0.000	
10	10.92	33.31	4.84		10	10.92	33.31	4.84		25.49	250.1	0.025	
25	10.86	33.31	4.95		20	10.87	33.31	4.90		25.50	249.4	0.050	
49	10.89	33.32	5.04		30	10.86	33.31	5.00		25.51	249.4	0.075	
73	9.06	33.49	3.52		50	10.90	33.32	5.04		25.51	249.8	0.125	
98	8.33	33.73	2.89		75	8.90	33.51	3.50		25.99	204.3	0.182	
151	8.42	34.04	1.78		100	8.33	33.75	2.81		26.26	178.5	0.230	
200	7.96	34.11	1.56		150	8.42	34.03	1.78		26.47	159.9	0.314	
298	6.33	34.04	1.47		200	7.96	34.11	1.56		26.60	147.7	0.392	
					250	7.09	34.09	1.55		26.71	137.9	0.462	
					300	(6.28)	(34.04)	(1.45)		(26.78)	(129.7)	(0.530)	
CREST; February 2, 1950; 1913 GCT; 35°33'N, 123°06'W; sounding, 2,100 fm; wind, 320°, force 1; weather, partly cloudy; sea, rough; wire angle, 0°.													70.70
0	11.12	33.21	5.78	0.62	0	11.12	33.21	5.78	0.62	25.38	260.6	0.000	
10	10.98	33.21	5.50	0.62	10	10.98	33.21	5.50	0.62	25.42	258.5	0.026	
25	11.00	33.20	5.56	0.66	20	11.00	33.20	5.54	0.64	25.39	259.7	0.052	
50	10.81	33.39	5.27	0.83	30	11.00	33.22	5.54	0.69	25.41	258.7	0.078	
75	9.73	33.49	4.08	1.38	50	10.81	33.39	5.27	0.83	25.58	242.6	0.128	
100	8.65	33.58	3.57	1.67	75	9.73	33.49	4.08	1.38	25.84	218.2	0.186	
155	7.76	33.95	2.61	1.90	100	8.65	33.58	3.57	1.67	26.08	195.8	0.237	
204	7.34	34.01	2.14	2.13	150	7.80	33.94	2.67	1.89	26.49	157.5	0.325	
303	6.55	34.11	1.30	2.66	200	7.38	34.00	2.18	2.11	26.60	147.7	0.402	
406	5.78	34.15	0.74	2.71	250	6.94	34.06	1.74	2.45	26.71	138.3	0.473	
504	5.40	34.27	0.39	2.88	300	6.60	34.11	1.32	2.65	26.79	130.8	0.541	
607	5.02	34.33	0.32	2.89	400	5.82	34.14	0.75	2.71	26.92	119.8	0.666	
810	4.28	34.45	0.43	2.92	500	5.41	34.27	0.40	2.87	27.07	106.2	0.779	
1008	3.63	34.49	0.59	2.94	600	5.04	34.33	0.32	2.89	27.16	98.3	0.881	
1213	3.22	34.52	0.79	2.95	700	4.68	34.39	0.36	2.91	27.25	90.5	0.976	
					800	4.31	34.45	0.43	2.92	27.34	82.6	1.062	
					1000	3.65	34.49	0.59	2.94	27.44	73.7	1.218	

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

70.70 BLACK DOUGLAS; February 3, 1950; 0730 GCT; 35°33'N, 123°06'W; sounding, 2,040 fm; wind, 220°, force 2; weather, cloudy; sea, moderate; wire angle, 7°.

0	11.19	33.22	5.86	0	11.19	33.22	5.86	25.38	261.0	0.000
10	11.24	33.22	3.36r	10	11.24	33.22	5.91	25.38	262.4	0.026
25	11.13	33.26	5.93	20	11.19	33.24	5.93	25.40	263.5	0.052
50	10.27	33.28	5.19	30	10.86	33.27	5.87	25.48	252.2	0.078
75	10.04	33.53	4.22	50	10.27	33.28	5.19	25.58	242.4	0.128
99	9.23	33.68	3.27	75	10.04	33.53	4.22	25.82	220.7	0.186
110p	8.28	33.76	3.11	100	9.12	33.69	3.25	26.10	194.7	0.237
153	7.87	33.91	-	150	7.90	33.90	2.77	26.45	161.7	0.326
195p	7.26	34.03	2.30	200	7.22	34.04	2.22	26.66	142.8	0.403
288p	6.66	34.14	1.15	250	6.90	34.12	1.48	26.76	133.3	0.472
383p	5.53	34.14	1.03	300	6.53	34.14	1.12	26.83	127.7	0.537
486p	5.36	34.08r	0.42	400	5.49	34.14	0.94	26.96	115.4	0.658
568p	4.92	34.29	0.41	500	5.30	34.21	0.41	27.04	109.4	0.771
720p	4.62	34.38	0.33	600	4.85	34.32	0.42	27.18	96.9	0.874
870p	3.97	34.47	0.49	700	4.67	34.37	0.33	27.24	91.7	0.969
				800	4.22	34.43	0.41	27.33	83.2	1.056

70.80 CREST; February 3, 1950; 0126 GCT; 35°12'N, 123°48'W; sounding, 2,225 fm; wind, 200°, force 2; weather, cloudy; sea, rough; wire angle, 29°.

0	12.78	33.06	5.54	0.44	0	12.78	33.06	5.54	0.44	24.96	301.3	0.000
9	12.48	33.08	5.45	0.52	10	12.35	33.08	5.45	0.54	25.05	292.1	0.030
22	11.55	33.10	5.37	0.75	20	11.60	33.10	5.38	0.74	25.21	277.5	0.058
44	11.11	33.13	5.51	0.77	30	11.37	33.11	5.41	0.76	25.26	272.9	0.086
65	10.86	33.24	5.60	0.84	50	10.88	33.15	5.55	0.78	25.38	262.0	0.139
86	10.93	33.31	5.60	0.88	75	10.89	33.28	5.62	0.86	25.48	252.2	0.203
133	9.66	33.62	3.35	1.70	100	10.75	33.38	5.24	1.01	25.58	244.0	0.265
244	7.20	34.00	2.06	2.31	150	9.14	33.72	2.91	1.82	26.11	193.7	0.375
326	6.22	34.05	1.49	2.50	200	7.95	33.91	2.32	2.10	26.45	162.5	0.464
402	5.54	34.13	1.07	2.71	250	7.10	34.01	2.08	2.30	26.65	144.1	0.541
485	5.40	34.22	0.61	2.85	300	6.50	34.03	1.75	2.43	26.75	135.2	0.610
655	4.72	34.31	0.35	2.96	400	5.56	34.13	1.13	2.67	26.94	117.2	0.737
831	4.14	34.42	0.39	3.04	500	5.36	34.23	0.59	2.86	27.05	108.5	0.849
1025	3.84	34.49	0.56	3.10	600	4.95	34.28	0.40	2.94	27.13	100.9	0.954
					700	4.55	34.34	0.35	2.96	27.23	92.5	1.051
					800	4.23	34.40	0.39	3.02	27.31	85.4	1.139
					1000	3.86	34.48	0.55	3.10	27.41	76.9	1.303

70.80 BLACK DOUGLAS; February 3, 1950; 1338 GCT; 35°13'N, 123°48'W; sounding, 2,220 fm; wind, 220°, force 4; weather, overcast; sea, very rough; wire angle, 0°.

0	12.06	32.94	5.68	0	12.06	32.94	5.68	25.00	297.0	0.000
10	12.07	32.94	5.69	10	12.07	32.94	5.69	25.00	297.2	0.030
25	11.96	32.95	5.72	20	12.02	32.94	5.70	25.01	296.7	0.059
50	11.16	33.15	5.68	30	11.85	32.97	5.71	25.07	291.4	0.089
74	10.80	33.25	5.72	50	11.16	33.15	5.68	25.33	266.6	0.144
98	10.56	33.33	5.38	75	10.80	33.25	5.69	25.47	253.6	0.210
153	8.90	33.86	2.82	100	10.52	33.34	5.27	25.59	243.2	0.272
202	8.32	33.96	2.50	150	8.99	33.85	2.87	26.24	181.9	0.378
300	6.62	34.02	1.85	200	8.35	33.96	2.51	26.43	164.8	0.464
402	5.65	34.05	1.19	250	7.57	34.00	2.17	26.58	151.2	0.544
500	5.29	34.22	0.53	300	6.62	34.02	1.85	26.72	137.7	0.616
601	4.82	34.29	0.43	400	5.65	34.05	1.18	26.87	124.3	0.747
				500	5.29	34.22	0.53	27.05	108.3	0.863
				600	4.82	34.29	0.44	27.15	98.7	0.967

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

CREST; February 3, 1950; 0739 GCT; 34°53'N, 124°30'W; sounding, 2,310 fm; wind, 130°, force 5; weather, cloudy; sea, rough; wire angle, 25°. 70.90

0	13.10	33.06	5.50	0.45	0	13.10	33.06	5.50	0.45	24.90	307.0	0.000	
9	13.05	33.07	5.47	0.50	10	13.04	33.06	5.47	0.50	24.90	307.1	0.031	
28	13.02	33.04	5.43	0.52	20	13.03	33.04	5.46	0.52	24.89	307.9	0.061	
54	12.99	33.04	5.42	0.52	30	13.02	33.04	5.43	0.52	24.89	307.8	0.092	
80	12.74	33.06	5.39	0.58	50	13.00	33.04	5.42	0.52	24.90	308.0	0.154	
106	11.30	33.51	5.40	0.90	75	12.80	33.06	5.40	0.56	24.95	303.3	0.230	
160	10.08	33.89	3.72	1.56	100	11.50	33.40	5.40	0.76	25.46	255.4	0.300	
212	9.02	33.98	2.42	2.04	150	10.25	33.86	4.12	1.45	26.04	200.9	0.415	
317	6.77	34.07	2.36	2.36	200	9.25	33.97	2.51	1.94	26.29	177.7	0.509	
420	5.96	34.16	1.11	2.73	250	8.12	34.02	2.40	2.19	26.51	157.8	0.592	
527	5.29	34.23	0.54	2.98	300	7.01	34.06	2.36	2.30	26.70	140.0	0.667	
631	4.96	34.22	0.38	3.01	400	6.07	34.14	1.27	2.67	26.89	122.8	0.799	
844	4.28	34.45	0.36	3.08	500	5.43	34.22	0.64	2.94	27.03	110.3	0.915	
1057	3.64	34.45	0.62	3.06	600	5.07	34.22	0.41	3.00	27.07	106.9	1.024	
1269	3.22	34.48	0.81	3.03	700	4.73	34.27	0.35	3.02	27.15	99.9	1.127	
					800	4.41	34.41	0.35	3.07	27.30	86.7	1.221	
					1000	3.81	34.45	0.56	3.07	27.40	77.9	1.385	

CREST; February 3, 1950; 1352 GCT; 34°32.5'N, 125°12'W; sounding, 2,425 fm; wind, 180°, force 6; weather, threatening sky; sea, rough; wire angle, 30°. 70.100

0	13.44	33.08	5.54	0.56	0	13.44	33.08	5.54	0.56	24.84	312.5	0.000	
10	13.41	33.06	5.54	0.56	10	13.41	33.06	5.54	0.56	24.83	313.3	0.031	
26	13.40	33.09	5.59	0.58	20	13.40	33.08	5.57	0.57	24.85	312.1	0.063	
52	13.48	33.09	5.34	0.59	30	13.42	33.09	5.59	0.58	24.85	311.8	0.094	
77	12.86	33.01	5.47	0.62	50	13.48	33.09	5.36	0.59	24.84	313.5	0.156	
102	11.22	33.10	5.52	0.96	75	12.98	33.01	5.45	0.62	24.88	310.4	0.234	
150	9.53	33.64	3.37	1.75	100	11.40	33.10	5.54	0.91	25.25	275.6	0.308	
175p	9.69r	33.71	3.02	1.91	150	9.53	33.64	3.37	1.75	25.99	205.4	0.428	
198	9.00	33.89	2.32	2.22	200	(9.00)	33.90	2.28	2.24	(26.28)	(179.0)	(0.524)	
281p	8.70r	34.13	1.44	2.42	250	(8.66)	34.08	1.68	2.37	(26.47)	(161.4)	(0.609)	
395p	7.58r	34.20	1.11	2.71	300	(8.29)	34.16	1.33	2.47	(26.59)	(150.9)	(0.687)	
505p	6.06	34.16	0.97	2.88	400	(7.26)	34.20	1.10	2.73	(26.78)	(134.4)	(0.829)	
742p	4.76	34.36	0.34	3.11	500	(6.11)	34.16	0.98	2.88	26.90	123.2	(0.958)	
986p	4.02	34.46	0.50	3.19	600	5.44	34.22	0.68	2.98	27.03	111.6	(1.076)	
1221p	3.37	34.52	0.76	3.17	700	4.93	34.33	0.39	3.08	27.17	98.0	(1.180)	
					800	4.58	34.40	0.38	3.14	27.27	89.6	(1.274)	
					1000	3.97	34.46	0.52	3.18	27.38	79.7	(1.444)	

CREST; February 3, 1950; 2213 GCT; 34°12'N, 125°54'W; sounding, 2,390 fm; wind, 180°, force 7; weather, rain; sea, very rough; wire angle, 45°. 70.110

0	13.61	33.12	5.15	0.48	0	13.61	33.12	5.15	0.48	24.84	312.4	0.000	
8	13.56	33.13	5.08	0.50	10	13.55	33.12	5.09	0.50	24.85	311.7	0.031	
23	13.51	33.10	5.19	0.52	20	13.52	33.10	5.17	0.52	24.84	312.7	0.062	
43	13.19	33.05	5.07	0.59	30	13.50	33.07	5.18	0.54	24.82	314.8	0.094	
62	13.06	33.08	4.90	0.57	50	13.12	33.06	5.01	0.58	24.89	308.7	0.156	
81	12.00	33.08	5.26	0.79	75	12.50	33.08	5.12	0.69	25.03	296.3	0.232	
118	10.18	33.08	-	-	100	10.90	33.08	5.07	1.02	25.32	268.6	0.302	
154	9.16	33.35	4.13	1.48	150	9.25	33.32	4.23	1.46	25.78	225.1	0.426	
220	8.06	33.94	2.96	2.02	200	8.28	33.85	3.27	1.86	26.35	171.9	0.525	
292	7.38	34.07	1.89	2.41	250	7.78	34.02	2.50	2.19	26.56	152.9	0.606	
366	6.64	34.09	-	2.73	300	7.27	34.07	1.78	2.46	26.67	142.7	0.681	
436	6.40	34.20	0.78	2.86	400	6.54	34.14	0.95	2.81	26.83	129.1	0.816	
583	5.18	34.23	0.45	3.12	500	5.95	34.21	0.60	2.99	26.96	117.3	0.940	
742	4.48	34.33	0.43	3.11	600	5.06	34.24	0.45	3.12	27.09	105.2	1.051	
933	3.97	34.40	0.41	3.16	700	4.60	34.31	0.41	3.11	27.20	95.4	1.150	
					800	4.31	34.36	0.42	3.12	27.27	89.3	1.244	
					1000	(3.80)	(34.42)			(27.37)	(80.6)	(1.414)	

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

75.60 BLACK DOUGLAS; February 9, 1950; 1315 GCT; 35°01'N, 121°46'W; sounding, 1,200 fm; wind, 320°, force 4; weather, overcast; sea, rough; wire angle, 12°.

0	11.70	33.22	5.74	0	11.70	33.22	5.74	25.28	270.1	0.000
10	11.72	33.24	5.91	10	11.72	33.24	5.91	25.30	269.0	0.027
25	11.69	33.24	5.32	20	11.70	33.24	5.52	25.30	268.9	0.054
54	11.46	33.31	5.51	30	11.69	33.24	5.33	25.30	269.0	0.081
78	9.60	33.40	4.45	50	11.60	33.29	5.51	25.36	264.2	0.134
107	8.72	33.64	3.56	75	9.86	33.38	4.55	25.73	228.7	0.196
160	8.40	33.98	2.19	100	8.87	33.56	3.90	26.03	200.6	0.249
213	7.44	34.04	2.13	150	8.46	33.95	2.23	26.40	166.3	0.341
320	6.67	34.14	1.16	200	7.64	34.03	2.17	26.59	149.4	0.420
363p	6.46	34.19	0.79	250	7.10	34.07	1.94	26.69	139.6	0.492
430	6.10	34.20	0.61	300	6.79	34.12	1.45	26.77	133.3	0.560
537	5.44	34.24	-	400	6.25	34.20	0.67	26.91	120.7	0.687
				500	5.66	34.22		27.00	113.1	0.804

80.55 BLACK DOUGLAS; February 9, 1950; 2223 GCT; 34°19'N, 120°48'W; sounding, 440 fm; wind, 320°, force 2; weather, fog; sea, moderate; wire angle, 21°.

0	11.68	33.39	5.75	0	11.68	33.39	5.75	25.42	257.2	0.000
10	11.63	33.40	5.83	10	11.63	33.40	5.83	25.44	255.8	0.026
23	11.47	33.42	5.48	20	11.50	33.47	5.55	25.47	252.8	0.051
46	11.27	33.52	5.07	30	11.39	33.44	5.39	25.51	248.9	0.076
68	10.44	33.64	3.61	50	11.24	33.54	4.60	25.62	239.6	0.125
90	9.89	33.69	3.19	75	10.20	33.66	3.45	25.89	213.5	0.182
135	9.32	33.89	2.31	100	9.74	33.73	2.94	26.02	201.6	0.234
180	8.81	34.05	1.93	150	9.16	33.96	2.14	26.30	176.0	0.328
271	7.88	34.11	1.80	200	8.58	34.07	1.86	26.48	160.1	0.412
361	7.14	34.18	1.01	250	8.07	34.10	1.84	26.58	151.2	0.490
452	6.38	34.23	0.67	300	7.64	34.13	1.63	26.66	143.6	0.563
546	5.80	34.28	0.48	400	6.81	34.20	0.82	26.84	128.4	0.699
643	5.40	34.36	0.35	500	6.07	34.25	0.57	26.97	116.0	0.821
				600	5.56	34.33	0.37	27.10	104.9	0.932

80.60 BLACK DOUGLAS; February 10, 1950; 0236 GCT; 34°09'N, 121°09'W; sounding, 1,240 fm; wind, 320°, force 1; weather, drizzle; sea, slight; wire angle, 9°.

0	11.64	-	5.75	0	11.64	(33.44)	5.75	(25.46)	(252.8)	(0.000)
10	11.67	33.44	6.02	10	11.67	33.44	6.02	25.46	253.6	0.025
25	11.63	33.46	6.16	20	11.65	33.45	6.12	25.47	252.6	0.051
50	11.58	33.48	5.89	30	11.61	33.47	6.13	25.49	250.7	0.076
74	11.33	33.48	5.65	50	11.58	33.48	5.89	25.51	249.7	0.126
99	10.82	33.62	4.45	75	11.33	33.48	5.61	25.55	245.9	0.188
153	9.28	33.93	2.36	100	10.80	33.63	4.40	25.77	226.3	0.247
201	8.60	34.11	1.74	150	9.34	33.92	2.40	26.24	182.0	0.349
297	7.45	34.18	1.13	200	8.61	34.11	1.75	26.50	157.6	0.460
396	6.53	34.23	0.66	250	8.06	34.16	1.38	26.63	146.6	0.510
492	5.94	34.29	0.85	300	7.41	34.18	1.11	26.74	136.6	0.580
592	5.47	34.34	0.66	400	6.51	34.23	0.66	26.90	121.7	0.709
788	4.48	34.43	0.41	500	5.90	34.29	0.83	27.03	110.9	0.826
982	3.92	34.47	0.57	600	5.43	34.34	0.65	27.12	102.5	0.932
1185	3.49	34.52	0.71	700	4.87	34.39	0.49	27.23	92.8	1.030
				800	4.43	34.43	0.43	27.31	85.5	1.120
				1000	3.88	34.47	0.58	27.40	78.0	1.283

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

BLACK DOUGLAS; February 10, 1950; 0923 GCT; 33°49'N, 121°51'W; sounding, 1,980 fm; wind, 170°, force 4; weather, intermittent heavy rain; sea, moderate; wire angle, 28°. 80.70

0	12.24	33.31	5.33	0	12.24	33.31	5.33	25.25	273.2	0.000
9	12.24	33.32	5.59	10	12.25	33.32	5.59	25.26	272.4	0.027
20	12.26	33.31	5.69	20	12.26	33.31	5.69	25.25	273.6	0.055
45	12.18	33.31	5.69	30	12.26	33.31	5.70	25.25	273.8	0.082
64	11.97	33.35	5.11	50	12.12	33.32	5.65	25.20	278.6	0.137
88	11.46	33.42	4.91	75	11.76	33.38	5.00	25.40	260.8	0.205
128	9.16	33.66	3.20	100	10.65	33.46	4.70	25.66	236.3	0.267
169	8.24	33.95	2.82	150	8.55	33.84	2.97	26.30	175.8	0.370
252	7.50	34.11	1.53	200	7.92	34.05	2.42	26.56	151.7	0.451
340	6.46	34.09	1.27	250	7.52	34.11	1.55	26.67	141.6	0.525
425	6.02	34.18	0.77	300	6.86	34.10	1.40	26.75	134.9	0.594
510	5.74	34.25	0.44	400	6.12	34.15	0.92	26.89	122.7	0.723
680	5.00	34.36	0.39	500	5.77	34.24	0.46	27.00	113.0	0.841
859	4.32	34.45	0.45	600	5.38	34.30	0.39	27.10	104.8	0.950
1052	3.77	34.49	0.60	700	4.92	34.38	0.38	27.22	94.1	1.049
				800	4.52	34.43	0.42	27.30	86.5	1.139
				1000	3.92	34.48	0.56	27.40	77.7	1.304

BLACK DOUGLAS; February 10, 1950; 1611 GCT; 33°29'N, 122°32'W; sounding, 2,220 fm; wind, 240°, force 4; weather, drizzle; sea, rough; wire angle, 18°. 80.80

0	12.22	33.28	6.19	0	12.22	33.28	6.19	25.24	274.6	0.000
10	12.21	33.28	5.81	10	12.21	33.28	5.81	25.24	274.6	0.027
24	11.90	33.30	5.41	20	11.99	33.29	5.45	25.28	270.3	0.055
48	11.86	33.37	5.94	30	11.87	33.31	5.45	25.32	266.8	0.082
71	11.97	33.48	-	50	11.86	33.38	5.92	25.46	254.5	0.134
96	9.45	33.62	4.17	75	11.97	33.51	4.69	25.46	255.1	0.197
148	8.58	33.93	3.33	100	9.34	33.65	4.10	26.03	201.2	0.254
195	8.04	-	2.60	150	8.56	33.93	3.30	26.37	169.1	0.347
289	6.90	34.02	1.75	200	7.99	33.97	2.56	26.49	158.7	0.428
386	6.22	34.14	0.93	250	7.36	33.99	2.10	26.60	149.0	0.506
478	5.91	34.27	0.46	300	6.79	34.03	1.65	26.70	139.4	0.578
576	5.12	34.27	0.42	400	6.16	34.16	0.84	26.89	122.5	0.709
767	4.55	34.40	0.40	500	5.78	34.27	0.42	27.03	110.8	0.825
956	3.95	34.47	0.57	600	4.93	34.27	0.42	27.13	101.5	0.931
1155	3.46	34.54	0.75	700	4.48	34.35	0.41	27.24	90.9	1.045
				800	4.30	34.42	0.41	27.32	84.7	1.116
				1000	3.84	34.49	0.62	27.42	76.0	1.277

BLACK DOUGLAS; February 11, 1950; 0023 GCT; 33°09'N, 123°13'W; sounding, 2,320 fm; wind, 340°, force 5; weather, overcast; sea, very rough; wire angle, 35°. 80.90

0	12.68	33.17	5.55	0	12.68	33.17	5.55	25.06	291.4	0.000
8	12.67	33.17	5.75	10	12.66	33.17	5.75	25.06	290.9	0.029
24	12.65	33.18	5.47	20	12.65	33.18	5.55	25.07	290.5	0.058
49	12.16	33.21	5.79	30	12.63	33.19	5.51	25.09	289.6	0.087
73	11.30	33.24	5.25	50	12.10	33.21	5.79	25.20	279.1	0.144
92	9.91	33.33	4.27	75	11.10	33.25	5.17	25.42	259.0	0.211
138	8.90	33.73	3.24	100	9.59	33.40	4.07	25.79	223.6	0.272
184	8.10	33.98	2.63	150	8.71	33.83	3.09	26.27	178.9	0.372
277	7.02	34.04	1.90	200	7.89	34.00	2.49	26.53	155.0	0.455
364	6.18	34.09	1.25	250	7.31	34.02	2.13	26.63	146.2	0.531
456	5.58	34.14	0.84	300	6.80	34.05	1.68	26.72	137.9	0.602
545	5.16	34.20	0.59	400	5.91	34.11	1.08	26.88	123.2	0.732
725	4.60	34.38	0.44	500	5.37	34.17	0.73	27.00	113.0	0.851
907	3.94	34.45	0.56	600	4.98	34.25	0.49	27.11	103.5	0.959
1103	3.46	34.49	0.74	700	4.68	34.36	0.45	27.23	92.6	1.057
				800	4.32	34.42	0.49	27.31	84.9	1.145
				1000	3.71	34.47	0.65	27.42	76.0	1.307

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
80.100	BLACK DOUGLAS; February 11, 1950; 1835, 1907 GCT; 32°49'N, 123°54'W; sounding, 2,190 fm; wind, 340°, force 7; weather, cloudy; sea, high; wire angle, 30°, 36°.											
0	13.90	33.13	5.61		0	13.90	33.13	5.61		24.79	317.4	0.000
9	13.92	33.21	5.65		10	13.92	33.21	5.65		24.84	312.6	0.031
22	13.92	33.13	5.57		20	13.92	33.13	5.57		24.78	318.6	0.063
48	13.94	33.13	5.72		30	13.93	33.13	5.60		24.78	318.6	0.095
70	13.20	33.03	-		50	13.94	33.13	5.73		24.78	319.5	0.159
95	12.27	33.06	5.56		75	12.99	33.03	5.67		24.89	309.2	0.237
143	10.39	33.24	4.78		100	12.11	33.07	5.49		25.09	290.5	0.312
					150	10.19	33.30	4.72		25.62	241.4	0.446
179	9.54	33.60	4.51		200	9.09	33.75	4.30		26.15	191.4	0.554
270	7.67	33.96	3.42		250	8.05	33.93	3.66		26.45	163.4	0.642
366	6.17	33.98	2.31		300	7.13	33.98	3.07		26.62	147.4	0.719
459	5.47	34.09	1.26		400	5.86	34.01	1.90		26.81	129.9	0.858
551	5.02	34.20	0.72		500	5.26	34.14	0.96		26.99	114.0	0.980
736	4.49	34.33	0.36		600	4.86	34.24	0.57		27.11	102.8	1.089
927	3.93	34.45	0.51		700	4.59	34.31	0.38		27.20	95.2	1.188
1122	3.45	34.49	0.74		800	4.32	34.37	0.38		27.27	88.7	1.280
					1000	3.74	34.47	0.57		27.41	76.4	1.445
80.110	BLACK DOUGLAS; February 12, 1950; 0445 GCT; 32°29'N, 124°34.5'W; sounding, 2,280 fm; wind, 360°, force 6; weather, cloudy; sea, very rough; wire angle, 12°.											
0	15.15	33.53	5.42		0	15.15	33.53	5.42		24.83	313.5	0.000
10	15.15	33.57	5.38		10	15.15	33.57	5.38		24.86	310.9	0.031
25	15.17	33.54	5.65		20	15.16	33.55	5.61		24.84	312.7	0.062
54	15.18	33.55	5.54		30	15.18	33.54	5.63		24.83	314.1	0.094
78	15.20	33.57	5.50		50	15.19	33.55	5.54		24.83	314.2	0.156
107	14.08	33.66	5.39		75	15.20	33.57	5.50		24.85	313.7	0.235
161	11.83	33.73	4.86		100	15.00	33.64	5.45		24.94	305.1	0.312
214	9.11	33.82	3.86		150	12.32	33.72	5.00		25.56	247.6	0.450
333p	7.34	34.07	2.08		200	9.89	33.78	4.10		26.04	202.0	0.563
446p	6.44	34.16	1.00		250	8.39	33.88	3.15		26.36	172.0	0.657
559p	5.69	34.22	0.57		300	7.67	34.00	2.46		26.56	153.6	0.738
781p	4.78	34.42	0.48		400	6.80	34.13	1.34		26.78	133.4	0.881
1006p	3.92	34.49	0.63		500	6.07	34.19	0.76		26.93	120.3	1.008
1202p	3.44	34.54	0.79		600	5.51	34.25	0.50		27.04	110.3	1.123
					700	5.12	34.35	0.45		27.17	98.9	1.228
					800	4.70	34.43	0.48		27.28	88.8	1.322
					1000	3.94	34.49	0.62		27.41	77.3	1.488
80.120	BLACK DOUGLAS; February 5, 1950; 1752 GCT; 32°09'N, 125°15.5'W; sounding, 2,240 fm; wind, 190°, force 1; weather, fog; sea, rough; wire angle, 9°.											
0	14.76	33.37	5.59		0	14.76	33.37	5.59		24.79	316.9	0.000
10	14.78	33.37	5.29		10	14.78	33.37	5.29		24.79	317.7	0.032
25	14.74	33.37	5.54		20	14.77	33.37	5.45		24.79	317.7	0.064
50	14.71	33.39	5.41		30	14.73	33.37	5.54		24.80	317.2	0.095
74	15.25	33.51	5.50		50	14.71	33.39	5.41		24.82	313.6	0.158
98	15.28	33.51	5.42		75	15.25	33.51	5.50		24.79	320.5	0.238
153	12.45	33.98	4.74		100	15.28	33.51	5.41		24.78	319.9	0.318
201	9.51	33.80	4.44		150	12.78	33.97	4.77		25.66	237.9	0.457
298	7.54	34.02	2.73		200	9.55	33.80	4.44		26.11	195.2	0.566
398	6.72	34.16	1.14		250	8.25	33.90	3.75		26.39	168.5	0.656
494	5.94	34.20	0.67		300	7.51	34.02	2.70		26.60	149.9	0.736
593	5.50	34.29	0.36		400	6.69	34.16	1.12		26.82	129.5	0.875
788	4.62	34.42	0.36		500	5.91	34.20	0.65		26.95	117.7	0.999
980	3.95	34.49	0.54		600	5.46	34.30	0.37		27.09	105.9	1.111
1182	3.40	34.52	0.82		700	4.98	34.37	0.35		27.20	95.5	1.212
					800	4.57	34.43	0.36		27.29	87.2	1.303
					1000	3.88	34.49	0.57		27.42	76.4	1.466

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OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
BLACK DOUGLAS; February 12, 1950; 1027 GCT; 32°09'N, 125°15'W; sounding, 2,320 fm; wind, 360°, force 4; weather, cloudy; sea, very rough; wire angle, 27°.													80.120
0	14.44	33.80r	5.39		0	14.44	(33.32)	5.39		(24.82)	(314.3)	(0.000)	
10	14.45	33.31	5.31		10	14.45	33.31	5.31		24.81	315.5	0.031	
22	14.42	33.26	5.11		20	14.42	33.26	5.13		24.78	318.9	0.063	
49	14.45	33.25	5.41		30	14.42	33.25	5.18		24.77	319.7	0.095	
72	14.34	33.26	6.31r		50	14.45	33.25	5.41		24.76	320.9	0.159	
98	12.79	33.39	5.14		75	14.30	33.27	5.30		24.81	317.1	0.239	
147	10.13	33.47	4.42		100	12.67	33.40	5.10		25.24	276.7	0.313	
196	8.94	33.84	2.94		150	10.05	33.48	4.34		25.78	226.0	0.439	
293	7.20	34.00	2.52		200	8.85	33.85	2.90		26.27	179.5	0.540	
393	6.58	34.18	1.02		250	7.83	33.94	2.74		26.49	159.5	0.625	
490	5.98	34.25	0.46		300	7.14	34.01	2.46		26.64	145.4	0.701	
587	5.44	34.20	0.32		400	6.54	34.19	0.94		26.87	125.4	0.837	
776	4.64	34.46	0.42		500	5.91	34.26	0.43		27.00	113.3	0.956	
969	4.10	34.47	0.53		600	5.37	34.34	0.31		27.13	101.8	1.064	
1164	3.60	34.51	0.79		700	4.91	34.42	0.36		27.25	91.1	1.160	
					800	4.56	34.47	0.43		27.33	84.0	1.248	
					1000	4.02	34.47	0.55		27.38	79.6	1.411	
BLACK DOUGLAS; February 5, 1950; 1054, 1121 GCT; 31°49'N, 125°56'W; sounding, 2,320 fm; wind, 190°, force 2; weather, clear; sea, rough; wire angle, 6°, 6°.													80.130
0	15.44	33.54	5.47		0	15.44	33.54	5.47		24.77	318.8	0.000	
10	15.46	33.53	5.45		10	15.46	33.53	5.45		24.76	320.1	0.032	
25	15.44	33.53	5.41		20	15.45	33.53	5.42		24.76	320.4	0.064	
48	15.28	33.51	5.43		30	15.42	33.53	5.41		24.77	320.0	0.096	
73	15.32	33.51	5.44		50	15.27	33.51	5.41		24.78	318.9	0.160	
97	14.40	33.55	5.47		75	15.32	33.51	5.43		24.77	320.6	0.240	
					100	14.08	33.56	5.45		25.08	292.0	0.316	
151	11.98	33.62	5.05		150	11.99	33.62	5.10		25.54	246.9	0.451	
199	9.00	33.75	3.44		200	8.99	33.76	3.44		26.17	189.2	0.560	
297	7.84	34.05	1.86		250	8.35	33.93	2.40		26.40	167.9	0.649	
398	6.86	34.15	1.05		300	7.80	34.06	1.86		26.59	151.1	0.729	
494	6.10	34.22	0.54		400	6.84	34.15	1.04		26.79	132.5	0.871	
529p	5.74	34.22	0.41		500	6.04	34.22	0.51		26.95	118.0	0.996	
697p	5.00	34.33	0.29		600	5.39	34.26	0.32		27.06	107.9	1.109	
887p	4.25	34.43	0.44		700	4.99	34.33	0.30		27.17	98.7	1.212	
					800	4.57	34.39	0.35		27.26	90.0	1.307	
BLACK DOUGLAS; February 12, 1950; 1623 GCT; 31°49'N, 125°56'W; sounding, 2,420 fm; wind, 360°, force 3; weather, cloudy; sea, high; wire angle, 27°.													80.130
0	14.63	33.31	5.54		0	14.63	33.31	5.54		24.77	318.9	0.000	
10	14.65	33.35	5.71		10	14.65	33.35	5.71		24.80	316.7	0.032	
23	14.66	33.36	5.52		20	14.65	33.36	5.60		24.80	316.1	0.063	
50	14.66	33.35	5.39		30	14.66	33.36	5.45		24.80	316.4	0.095	
71	14.69	33.35	5.51		50	14.66	33.35	5.39		24.79	317.9	0.158	
98	13.35	33.35	5.54		75	14.71	33.35	5.54		24.78	319.5	0.238	
146	10.90	33.48	4.67		100	13.22	33.35	5.51		25.09	290.6	0.314	
194	9.16	33.82	3.88		150	10.65	33.51	4.62		25.70	233.7	0.446	
288	7.89	34.08	2.02		200	9.06	33.85	3.75		26.24	182.8	0.550	
386	6.81	34.16	1.08		250	8.38	34.02	2.67		26.47	161.6	0.636	
480	6.12	34.25	0.59		300	7.74	34.09	1.86		26.62	147.9	0.714	
575	5.64	34.31	0.47		400	6.68	34.17	0.99		26.83	128.6	0.851	
760	4.74	34.43	0.35		500	6.01	34.26	0.55		26.99	114.6	0.973	
950	4.08	34.45	0.68		600	5.52	34.33	0.45		27.10	104.5	1.082	
1145	3.49	34.51	0.89		700	5.00	34.40	0.39		27.22	93.6	1.181	
					800	4.61	34.44	0.39		27.30	87.1	1.271	
					1000	3.92	34.46	0.76		27.39	79.1	1.438	

SIO

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5002

	OBSERVED					INTERPOLATED					COMPUTED		
	Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
	m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
83.55													
	0	11.70	33.37	5.68	0.79	0	11.70	33.37	5.68	0.79	25.40	259.0	0.000
	9	11.49	33.40	5.50	0.87	10	11.45	33.40	5.50	0.88	25.47	252.5	0.026
	23	11.28	33.44	5.41	0.99	20	11.32	33.44	5.42	0.96	25.53	247.5	0.051
	46	10.83	33.51	4.83	1.26	30	11.16	33.46	5.28	1.07	25.54	243.7	0.075
	67	10.24	33.60	3.81	1.59	50	10.73	33.52	4.63	1.32	25.69	232.4	0.123
	88	9.66	33.77	2.84	1.96	75	10.00	33.65	3.48	1.73	25.92	211.1	0.178
	134	8.94	33.98	2.01	2.28	100	9.45	33.84	2.50	2.07	26.16	188.7	0.228
						150	8.73	34.02	1.83	2.34	26.42	165.1	0.316
	175	8.42	34.07	1.59	2.42	200	8.18	34.10	1.45	2.48	26.56	152.0	0.396
	261	7.74	34.16	1.17	2.61	250	7.80	34.15	1.22	2.59	26.66	143.6	0.470
	351	6.94	34.22	0.80	2.78	300	7.38	34.19	1.00	2.70	26.75	135.4	0.540
	445	6.30	34.22	0.57	2.85	400	6.52	34.22	0.65	2.81	26.89	122.8	0.668
	537	6.02	34.25	0.46	3.03	500	6.17	34.23	0.50	2.96	26.95	118.9	0.790
	628	5.41	34.33	0.36	3.10	600	5.60	34.31	0.37	3.09	27.08	106.9	0.903
	728	4.88	34.38	0.36	3.09	700	5.00	34.37	0.35	3.09	27.20	95.8	1.004
	826	4.45	34.40	0.43	3.11	800	4.55	34.40	0.41	3.10	27.27	89.1	1.097
						1000	(3.90)	(34.41)			(27.35)	(82.6)	(1.268)
83.60													
	0	12.08	33.24	5.56	0.64	0	12.08	33.24	5.56	0.64	25.23	275.3	0.000
	9	11.99	33.24	5.53	0.63	10	11.94	33.24	5.53	0.63	25.26	272.8	0.027
	21	11.74	33.33	5.45	0.74	20	11.75	33.33	5.47	0.74	25.36	263.2	0.054
	40	11.45	33.45	5.38	0.92	30	11.60	33.41	5.43	0.83	25.45	254.8	0.080
	60	11.14	33.51	5.10	1.10	50	11.30	33.48	5.31	1.01	25.56	244.8	0.130
	79	10.50	33.57	4.29	1.42	75	10.60	33.56	4.50	1.30	25.75	227.6	0.189
	121	9.10	33.73	3.12	1.91	100	9.75	33.64	3.63	1.75	25.95	208.3	0.244
	158	8.39	33.86	2.94	1.95	150	8.50	33.84	2.95	1.94	26.31	175.1	0.339
	232	7.48	34.04	2.28	2.25	200	7.82	33.97	2.64	2.10	26.51	156.3	0.423
	309	6.97	34.14	1.37	2.57	250	7.31	34.07	2.07	2.32	26.67	142.4	0.497
	383	6.48	34.23	0.73	2.90	300	7.02	34.13	1.45	2.53	26.75	135.0	0.566
	460	5.92	34.25	0.49	2.97	400	6.35	34.24	0.63	2.94	26.93	119.1	0.693
	611	5.00	34.34	0.34	3.12	500	5.64	34.27	0.42	3.01	27.04	109.2	0.807
	775	4.52	34.42	0.35	3.12	600	5.05	34.33	0.35	3.12	27.16	98.5	0.912
	967	3.94	34.46	0.56	3.12	700	4.70	34.39	0.35	3.12	27.25	90.6	1.006
						800	4.45	34.43	0.38	3.12	27.31	85.7	1.094
						1000	(3.88)	(34.46)			(27.39)	(78.7)	(1.259)
83.70													
	0	12.70	33.24	5.62	0.45	0	12.70	33.24	5.62	0.45	25.11	286.6	0.000
	10	12.67	33.23	5.70	0.58	10	12.67	33.23	5.70	0.58	25.11	286.9	0.029
	25	12.62	33.23	5.63	0.52	20	12.64	33.23	5.65	0.54	25.11	286.7	0.057
	50	12.00	33.28	5.58	0.58	30	12.58	33.24	5.62	0.53	25.13	285.1	0.086
	74	10.63	33.21	5.03	1.01	50	12.00	33.28	5.58	0.58	25.28	271.9	0.142
	98	9.80	33.39	4.29	1.32	75	10.59	33.21	5.00	1.02	25.48	253.1	0.207
	152	8.64	33.86	2.76	1.94	100	9.70	33.42	4.27	1.36	25.79	223.7	0.267
	200	7.92a)	33.86	2.62	2.04	150	8.67	33.86	2.79	1.92	26.30	176.0	0.367
	296	6.81	34.04	1.79	2.34	200	7.92	33.86	2.62	2.04	26.41	165.9	0.452
	395	5.93	34.13	1.10	2.64	250	7.30	33.94	2.20	2.18	26.57	151.9	0.532
	489	5.77	34.24	0.57	2.79	300	6.77	34.04	1.77	2.36	26.72	138.3	0.604
	588	5.12	34.27	0.41	2.89	400	5.91	34.14	1.06	2.65	26.91	120.9	0.734
	783	4.25	34.40	0.54	2.98	500	5.71	34.24	0.57	2.81	27.01	112.3	0.850
	975	3.78	34.47	0.66	3.01	600	5.05	34.27	0.42	2.90	27.11	102.9	0.958
	1177	3.36	34.53	0.83	3.01	700	4.56	34.35	0.48	2.95	27.23	91.9	1.055
						800	4.20	34.41	0.55	2.98	27.32	84.2	1.143
						1000	3.72	34.48	0.67	3.01	27.42	75.4	1.303

a) Alternate value, 7.60°C, not used in interpolation.

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

CREST; February 10, 1950; 0405 GCT; 32°56'N, 122°04'W; sounding, 2,200 fm; wind, 270°, force 2; weather, drizzle; sea, moderate; wire angle, 0°. 83.80

0	12.41	33.28	5.61	0.54	0	12.41	33.28	5.61	0.54	25.20	278.4	0.000
10	12.38	33.28	5.60	0.55	10	12.38	33.28	5.60	0.55	25.21	277.5	0.028
25	12.38	33.30	5.56	0.56	20	12.38	33.29	5.58	0.55	25.21	277.3	0.056
50	12.04	33.35	5.48	0.61	30	12.38	33.31	5.55	0.57	25.22	276.5	0.083
75	10.31	33.31	4.60	1.22	50	12.04	33.35	5.48	0.61	25.32	267.6	0.138
100	9.50	33.57	3.57	1.67	75	10.31	33.31	4.60	1.22	25.60	241.2	0.201
154	8.25	33.87	2.77	2.00	100	9.50	33.57	3.57	1.67	25.94	209.1	0.257
203	7.56	33.99	2.38	2.17	150	8.32	33.86	2.82	1.98	26.35	170.8	0.352
301	6.56	34.05	1.52	2.53	200	7.59	33.98	2.39	2.16	26.55	152.3	0.460
404	5.89	34.16	0.69	2.84	250	7.04	34.02	2.00	2.33	26.66	142.6	0.507
503	5.30	34.21	0.48	2.95	300	6.57	34.05	1.53	2.53	26.75	134.8	0.576
606	4.92	34.33	0.33	3.06	400	5.91	34.16	0.71	2.83	26.92	119.4	0.703
808	4.30	34.42	0.43	3.01	500	5.32	34.21	0.48	2.94	27.03	109.5	0.818
1004	3.76	34.46	0.60	3.00	600	4.94	34.33	0.33	3.06	27.17	97.1	0.922
1207	3.27	34.52	0.86	3.00	700	4.61	34.40	0.35	3.03	27.27	88.8	1.014
					800	4.32	34.42	0.40	3.01	27.31	84.9	1.101
					1000	3.77	34.46	0.59	3.00	27.40	77.3	1.263

CREST; February 9, 1950; 2152 GCT; 32°38'N, 122°41'W; sounding, 2,275 fm; wind, 340°, force 2; weather, rain; sea, rough; wire angle, 6°. 83.90

0	13.32	33.13	5.45	0.46	0	13.32	33.13	5.45	0.46	24.90	306.3	0.000
10	13.24	33.13	5.58	0.47	10	13.24	33.13	5.58	0.47	24.92	304.9	0.031
25	12.40	33.19	5.56	0.55	20	12.45	33.16	5.57	0.52	25.10	288.3	0.060
50	12.31	33.25	5.55	0.61	30	12.37	33.20	5.55	0.56	25.14	284.4	0.089
75	10.18	33.25	4.70	1.20	50	12.31	33.25	5.55	0.61	25.19	279.8	0.145
99	9.50	33.42	4.09	1.46	75	10.18	33.25	4.70	1.20	25.57	244.5	0.211
153	8.58	33.87	2.71	1.95	100	9.45	33.44	4.09	1.48	25.85	218.3	0.269
202	8.13	34.05	1.89	2.30	150	8.61	33.85	2.78	1.93	26.30	175.9	0.367
299	6.80	34.07	1.55	2.47	200	8.15	34.05	1.91	2.28	26.53	155.1	0.450
401	5.85	34.13	0.99	2.75	250	7.54	34.06	1.63	2.38	26.62	146.4	0.525
498	5.14	34.20	0.62	2.90	300	6.80	34.07	1.54	2.47	26.73	136.5	0.596
599	4.64	34.23	0.43	2.96	400	5.86	34.13	1.02	2.75	26.91	120.9	0.724
797	4.21	34.39	0.43	3.06	500	5.12	34.20	0.62	2.90	27.05	107.8	0.839
992	3.71	34.49	0.65	2.99	600	4.64	34.23	0.45	2.96	27.13	101.0	0.943
1195	3.30	34.51	0.87	3.00	700	4.39	34.29	0.45	3.02	27.20	94.4	1.041
					800	4.20	34.39	0.45	3.06	27.30	85.8	1.131
					1000	3.69	34.50	0.68	2.99	27.44	73.4	1.291

CREST; February 8, 1950; 0328 GCT; 33°50'N, 118°37.5'W; sounding, 320 fm; wind, 260°, force 1; weather, partly cloudy; sea, moderate; wire angle, 11°. 87.35

0	12.45	33.48	5.65	0.55	0	12.45	33.48	5.65	0.55	25.34	264.4	0.000
10	12.42	33.51	5.58	0.59	10	12.42	33.51	5.58	0.59	25.37	261.5	0.026
25	12.19	33.53	5.48	0.67	20	12.28	33.53	5.52	0.63	25.42	257.9	0.052
50	11.06	33.51	4.05	1.27	30	12.10	33.53	5.25	0.77	25.45	255.0	0.078
74	10.24	33.62	3.40	1.59	50	11.06	33.51	4.05	1.27	25.63	238.5	0.127
98	10.02	33.69	2.99	1.74	75	10.23	33.62	3.39	1.60	25.85	216.9	0.184
151	9.30	33.96	2.28	2.04	100	9.97	33.70	2.97	1.76	25.96	207.2	0.237
198	8.76	34.09	1.81	2.14	150	9.32	33.96	2.27	2.04	26.28	178.6	0.334
246	8.24	34.13	1.57	2.27	200	8.72	34.09	1.80	2.15	26.47	160.6	0.419
294	7.79	34.21	1.24	2.78	250	8.18	34.13	1.53	2.29	26.58	150.7	0.496
395	7.06	34.25	0.56	2.68	300	7.75	34.22	1.16	2.49	26.72	138.5	0.568
492	6.28	34.31	0.37	2.46	400	7.03	34.25	0.54	2.69	26.85	127.6	0.701
					500	(6.21)	(34.31)	(0.37)	(2.79)	(27.00)	(113.5)	(0.822)

S10

CCOFI 5002

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
87.40	CREST; February 8, 1950; 0720 GCT; 33°40'N, 118°58'W; sounding, 375 fm; wind, 320°, force 2; weather, partly cloudy; sea, moderate; wire angle, 3°.											
0	12.72	33.49	5.60	0.53	0	12.72	33.49	5.60	0.53	25.30	268.5	0.000
10	12.74	33.46	5.56	0.56	10	12.74	33.46	5.56	0.56	25.27	271.2	0.027
25	12.44	33.49	5.49	0.61	20	12.56	33.48	5.54	0.59	25.32	266.8	0.054
50	11.90	33.49	4.82	0.86	30	12.33	33.49	5.45	0.63	25.37	262.0	0.080
75	10.19	33.53	3.80	1.48	50	11.90	33.49	4.82	0.86	25.45	254.9	0.132
100	9.61	33.73	2.93	1.78	75	10.19	33.53	3.80	1.48	25.79	223.3	0.192
154	8.84	33.98	2.02	2.18	100	9.61	33.73	2.93	1.78	26.05	199.1	0.245
202	8.33	34.13	1.51	2.35	150	8.88	33.96	2.08	2.15	26.34	171.9	0.337
251	7.96	34.16	1.09	2.51	200	8.34	34.13	1.53	2.34	26.56	151.9	0.419
300	7.58	34.20	0.95	2.51	250	7.96	34.16	1.11	2.51	26.64	144.9	0.492
404	6.82	34.25	0.60	2.72	300	7.58	34.20	0.95	2.51	26.73	137.7	0.563
503	6.12	34.31	0.06r	2.91	400	6.85	34.25	0.60	2.72	26.87	125.1	0.694
					500	6.13	34.30		2.90	27.01	113.1	0.813
87.50	CREST; February 8, 1950; 1333 GCT; 33°20'N, 119°39'W; sounding, 42 fm; wind, 320°, force 2; weather, clear; sea, rough; wire angle, 0°.											
0	11.86	33.53	5.37	0.79	0	11.86	33.53	5.37	0.79	25.50	249.5	0.000
10	11.88	33.52	5.45	0.79	10	11.88	33.52	5.45	0.79	25.48	251.2	0.025
20	11.90	33.53	5.32	0.81	20	11.90	33.53	5.32	0.81	25.49	250.8	0.050
30	11.83	33.53	5.25	0.88	30	11.83	33.53	5.25	0.88	25.50	250.2	0.075
40	11.24	33.58	4.78	1.13	50	10.88	33.60	4.30	1.29	25.73	228.8	0.123
50	10.88	33.60	4.30	1.29								
87.60	CREST; February 8, 1950; 1944 GCT; 33°00'N, 120°23'W; sounding, 450 fm; wind, 320°, force 6; weather, haze; sea, rough; wire angle, 22°.											
0	12.76	33.33	5.46	0.54	0	12.76	33.33	5.46	0.54	25.17	281.0	0.000
10	12.70	33.30	5.48	-	10	12.70	33.30	5.48	0.55	25.16	282.4	0.028
23	12.71	33.26	5.27	0.56	20	12.70	33.26	5.30	0.56	25.13	285.5	0.057
47	12.16	33.33	5.52	0.64	30	12.70	33.26	5.34	0.57	25.13	285.7	0.085
70	11.68	33.31	5.44	0.77	50	12.05	33.33	5.54	0.66	25.30	269.1	0.141
93	11.56	33.39	5.51	0.86	75	11.63	33.32	5.46	0.79	25.37	263.0	0.207
144	9.38	33.58	3.88	1.51	100	11.55	33.42	5.12	0.92	25.47	254.7	0.272
190	8.34	33.86	3.00	1.87	150	9.18	33.60	3.75	1.56	26.02	203.2	0.387
234	7.61	34.04	2.28	2.19	200	8.15	33.93	2.80	1.97	26.43	164.0	0.478
277	7.22	34.04	1.96	2.25	250	7.44	34.04	2.13	2.21	26.62	146.5	0.556
368	6.02	34.11	1.16	2.63	300	6.85	34.04	1.82	2.32	26.70	139.3	0.627
453	5.82	34.29	0.48	2.91	400	5.93	34.17	0.79	2.77	26.93	118.8	0.756
544	5.42	34.33	0.39	3.05	500	5.66	34.31	0.40	3.00	27.07	106.5	0.869
642	4.98	34.38	0.33	3.09	600	5.14	34.36	0.36	3.08	27.17	97.4	0.971
740	4.90	34.38	0.30	-	700	4.90	34.38	0.30		27.22	93.9	1.066

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

CREST; February 9, 1950; 0159 GCT; 32°40'N, 121°05'W; sounding, 2,200 fm; wind, 320°, force 6; weather, partly cloudy; sea, rough; wire angle, 11°. 87.70

0	13.26	33.17	5.52	0.57	0	13.26	33.17	5.52	0.57	24.95	302.0	0.000
10	13.24	33.18	5.47	0.49r	10	13.24	33.18	5.47	0.57	24.96	300.9	0.030
29	12.82	33.17	5.62	0.58	20	13.13	33.17	5.55	0.58	24.97	300.1	0.060
59	11.95	33.21	5.36	0.70	30	12.75	33.17	5.62	0.59	25.05	293.3	0.090
88	10.35	33.28	4.72	1.05	50	12.18	33.20	5.50	0.64	25.18	281.1	0.147
117	9.32	33.51	3.85	1.61	75	11.28	33.25	5.03	0.87	25.39	261.9	0.215
176	8.33	33.91	2.86	1.87	100	9.83	33.33	4.30	1.40	25.70	232.4	0.277
234	7.55	34.04	2.50	1.99	150	8.71	33.79	3.21	1.77	26.24	181.9	0.381
351	6.40	34.09	1.30	2.45	200	7.97	33.98	2.67	1.92	26.50	157.6	0.465
463	5.57	34.14	0.79	2.66	250	7.35	34.06	2.38	2.03	26.65	143.7	0.541
579	4.90	34.23	0.42	2.89	300	6.86	34.07	1.78	2.21	26.73	137.2	0.611
690	4.57	34.31	0.32	2.94	400	6.00	34.11	1.10	2.56	26.87	124.3	0.742
919	3.96	34.47	0.54	2.96	500	5.34	34.16	0.63	2.74	26.99	113.5	0.861
1140	3.38	34.51	0.82	2.91	600	4.80	34.24	0.38	2.90	27.12	102.2	0.968
1354	2.93	34.54	1.03	2.89	700	4.55	34.32	0.32	2.94	27.21	94.0	1.066
					800	4.28	34.39	0.40	2.95	27.30	86.7	1.157
					1000	3.73	34.49	0.66	2.94	27.43	74.7	1.319

CREST; February 9, 1950; 0812 GCT; 32°20'N, 121°42'W; sounding, 2,250 fm; wind, 320°, force 5; weather, partly cloudy; sea, very rough; wire angle, 45°. 87.80

0	13.68	33.21		0.48	0	13.68	33.21		0.48	24.89	307.8	0.000
8	13.68	33.21		0.50	10	13.68	33.21		0.50	24.89	307.9	0.031
18	13.67	33.21		0.50	20	13.67	33.21		0.50	24.89	307.9	0.062
39	12.71	33.15		0.67	30	13.67	33.17		0.55	24.86	310.8	0.092
54	11.58	33.13		0.83	50	11.80	33.13		0.78	25.20	279.2	0.152
74	10.88	33.15		0.92	75	10.83	33.15		0.93	25.39	261.6	0.219
105	9.48	33.48		1.50	100	9.61	33.43		1.44	25.81	221.6	0.280
136	8.93	33.69		1.72	150	8.79	33.80		1.77	26.23	182.2	0.381
193	8.30	33.96		2.06	200	8.19	33.97		1.92	26.46	161.7	0.466
247	7.42	34.00		1.89	250	7.38	34.00		2.07	26.60	148.6	0.544
300	6.58	34.02		2.20	300	6.58	34.02		2.20	26.73	137.2	0.615
359	6.58	34.14		2.58	400	6.37	34.17		2.68	26.87	124.6	0.746
466	5.65	34.20		2.82	500	5.39	34.22		2.87	27.03	109.7	0.863
588	4.99	34.29		2.97	600	4.94	34.30		2.98	27.15	99.4	0.968
760	4.44	34.38		3.01	700	4.62	34.35		3.02	27.23	92.6	1.064

CREST; February 9, 1950; 1449 GCT; 32°00'N, 122°24'W; sounding, 2,300 fm; wind, 330°, force 5; weather, overcast; sea, rough; wire angle, 22°. 87.90

0	14.52	33.31	5.34	0.48	0	14.52	33.31	5.34	0.48	24.79	317.0	0.000
9	14.47	33.30	5.38	0.45	10	14.48	33.30	5.38	0.45	24.79	317.0	0.032
27	14.50	33.30	5.37	0.47	20	14.48	33.30	5.38	0.46	24.79	317.3	0.063
55	14.52	33.30	5.33	0.53	30	14.50	33.30	5.36	0.48	24.79	317.8	0.095
82	14.36	33.30	5.35	0.50	50	14.51	33.30	5.33	0.53	24.79	318.5	0.159
109	12.42	33.31	5.27	0.63	75	14.42	33.30	5.35	0.51	24.81	317.2	0.238
173	10.62	33.62	4.46	1.07	100	12.85	33.30	5.30	0.59	25.13	287.2	0.314
217	8.79	33.87	3.91	1.51	150	11.20	33.50	4.78	0.88	25.59	243.8	0.446
324	7.45	34.07	1.95	2.23	200	9.33	33.80	4.20	1.34	26.15	191.6	0.556
426	6.28	34.13	1.23	2.53	250	8.25	33.95	3.00	1.80	26.43	164.9	0.645
533	5.12	34.14	0.85	2.78	300	7.70	34.04	2.25	2.11	26.59	151.1	0.723
635	4.79	34.26	0.43	2.94	400	6.57	34.13	1.35	2.47	26.81	130.2	0.864
762p	4.50a)	34.36	0.35	3.00	500	5.39	34.13	1.00	2.72	26.96	116.3	0.987
1095p	3.68	34.49	0.71	2.99	600	4.87	34.21	0.52	2.90	27.09	105.1	1.098
					700	4.64	34.32	0.35	2.98	27.20	95.1	1.198
					800	4.40	34.38	0.39	3.00	27.28	88.8	1.290
					1000	3.87	34.46	0.61	3.00	27.39	78.5	1.457

a) Alternate value, 4.21°C, not used in interpolation.

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

90.30 CREST; February 7, 1950; 2112 GCT; 33°24.5'N, 117°55'W; sounding, 340 fm; wind, missing; weather, partly cloudy; sea, moderate; wire angle, 0°.

0	13.39	33.49	5.51	0.50	0	13.39	33.49	5.51	0.50	25.16	281.5	0.000
10	13.07	33.49	5.57	0.52	10	13.07	33.49	5.57	0.52	25.23	275.1	0.028
25	12.86	33.51	5.30	0.56	20	12.94	33.51	5.50	0.55	25.57	271.8	0.055
50	11.59	33.49	4.43	1.17	30	12.75	33.51	5.12	0.64	25.31	268.3	0.082
75	10.48	33.54	3.91	1.57	50	11.59	33.49	4.43	1.17	25.52	249.1	0.134
99	9.93	33.66	3.26	1.84	75	10.48	33.54	3.91	1.57	25.75	227.1	0.193
136	9.15	34.00	2.18	2.24	100	9.92	33.66	3.20	1.86	25.94	209.3	0.248
203	8.54	34.10	1.88	2.36	150	8.96	34.03	2.08	2.28	26.39	167.9	0.342
253	8.10	34.34r	1.47	2.53	200	8.55	34.09	1.90	2.36	26.50	158.1	0.424
302	7.82	34.25	1.28	2.61	250	8.12	34.18	1.50	2.52	26.63	146.0	0.500
406	6.91	34.18	0.71	2.92	300	7.84	34.25	1.29	2.61	26.73	137.6	0.570
505	6.28	34.17	0.36	3.08	400	6.96	34.18	0.75	2.91	26.80	131.9	0.705
					500	6.30	34.17	0.37	3.08	26.88	125.0	0.834

90.37 CREST; February 7, 1950; 1627 GCT; 33°13'N, 118°24'W; sounding, 600 fm; wind, 270°, force 3; weather, partly cloudy; sea, moderate; wire angle, 15°.

0	13.01	33.49	5.47	0.50	0	13.01	33.49	5.47	0.50	25.24	273.8	0.000
10	12.97	33.49	5.46	0.54	10	12.97	33.49	5.46	0.54	25.25	273.2	0.027
24	12.79	33.47	5.21	0.60	20	12.84	33.47	5.30	0.59	25.26	272.7	0.055
48	12.25	33.49	4.82	0.90	30	12.70	33.47	5.15	0.64	25.29	270.4	0.082
73	11.10	33.49	4.05	1.37	50	12.18	33.49	4.78	0.97	25.40	259.7	0.135
97	9.94	33.73	2.99	1.88	75	11.01	33.49	4.00	1.42	25.62	239.6	0.197
150	9.24	33.98	2.19	2.20	100	9.86	33.75	2.95	1.91	26.02	201.8	0.252
197	8.73	34.11	1.80	2.39	150	9.24	33.98	2.19	2.20	26.30	176.0	0.347
285	7.72	34.18	1.31	2.64	200	8.69	34.11	1.78	2.39	26.49	158.7	0.430
388	6.90	34.25	0.70	2.89	250	8.08	34.16	1.53	2.54	26.62	147.0	0.507
482	6.28	34.29	0.41	3.05	300	7.58	34.19	1.21	2.68	26.72	138.4	0.578
577	5.80	34.34	0.35	3.12	400	6.80	34.26	0.67	2.91	26.88	123.7	0.709
781	4.75	34.45	0.38	3.20	500	6.18	34.29	0.38	3.06	26.99	114.5	0.828
878	4.34	34.45	0.39	3.22	600	5.68	34.36	0.35	3.12	27.11	104.3	0.938
978	4.16	34.47	0.41	3.25	700	5.17	34.43	0.36	3.15	27.23	93.5	1.036
					800	4.65	34.45	0.40	3.21	27.30	86.8	1.126
					1000	(4.13)	(34.47)	(0.40)	(3.25)	(27.37)	(80.8)	(1.295)

90.45 CREST; February 7, 1950; 1115 GCT; 33°00'N, 118°56'W; sounding, 1,000 fm; wind, 290°, force 3; weather, partly cloudy; sea, rough; wire angle, 25°.

0	12.71	33.49	5.55	0.62	0	12.71	33.49	5.55	0.62	25.30	268.2	0.000
10	12.63	33.55	5.44a)	0.63	10	12.63	33.55	5.44	0.63	25.36	262.5	0.028
23	12.20	33.55	5.64	0.73	20	12.43	33.55	5.54	0.69	25.40	259.4	0.055
45	11.62	33.57	5.20	1.04	30	11.97	33.55	5.63	0.79	25.49	251.1	0.080
68	10.79	33.57	4.24	1.46	50	11.48	33.57	5.10	1.09	25.59	241.5	0.129
91	9.65	33.71	3.23	1.93	75	10.39	33.58	3.90	1.60	25.80	222.7	0.180
140	9.04	34.00	2.20	2.32	100	9.50	33.79	2.93	2.07	26.11	193.1	0.239
185	8.34	34.07	1.83	2.41	150	8.89	34.02	2.12	2.34	26.39	162.7	0.328
272	7.68	34.18	1.30	2.63	200	8.17	34.10	1.70	2.45	26.56	151.7	0.407
363	7.16	34.25	0.87	2.84	250	7.79	34.16	1.40	2.57	26.67	142.7	0.481
452	6.45	34.31	0.45	3.06	300	7.54	34.20	1.16	2.69	26.73	137.0	0.550
545	5.84	34.34	0.35	3.12b)	400	6.89	34.28	0.66	2.95	26.89	123.5	0.680
731	5.00	34.42	0.39	3.19	500	6.12	34.33	0.38	3.10	27.03	110.8	0.798
921	4.28	34.47	0.47	3.22	600	5.54	34.36	0.35	3.16	27.13	102.6	0.905
1123	3.88	34.51	0.56	3.14	700	5.11	34.41	0.37	3.18	27.22	94.3	1.004
					800	4.70	34.44	0.42	3.21	27.29	88.0	1.095
					1000	4.08	34.49	0.50	3.20	27.39	78.9	1.262

a) Alternate value, 5.75 ml/L, not used in interpolation.
b) Alternate value, 3.24 μg at/L, not used in interpolation.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
CREST; February 7, 1950; 0551 GCT; 32°42'N, 119°30'W; sounding, 800 fm; wind, 200°, force 1; weather, rain; sea, rough; wire angle, 7°.													90.53
0	12.17	33.35	5.66	0.69	0	12.17	33.35	5.66	0.69	25.30	268.7	0.000	
10	12.01	33.39	5.62	0.72	10	12.01	33.39	5.62	0.72	25.36	262.9	0.027	
25	11.66	33.43	5.33	0.81	20	11.75	33.42	5.44	0.78	25.43	256.5	0.053	
50	11.44	33.50	5.22	0.94	30	11.60	33.45	5.30	0.84	25.48	251.9	0.078	
74	11.24	33.51	4.94	1.08	50	11.44	33.50	5.22	0.94	25.55	245.9	0.128	
98	9.66	33.75	3.03	1.88	75	11.24	33.51	4.92	1.10	25.59	242.2	0.189	
152	8.92	33.80	2.09	2.25	100	9.60	33.76	2.96	1.93	26.07	197.0	0.244	
200	8.50	34.09	1.63	2.39	150	8.93	33.80	2.10	2.25	26.21	184.4	0.339	
297	7.31	34.22	0.90	2.69	200	8.50	34.09	1.63	2.39	26.51	157.3	0.424	
399	6.84	34.25	0.63	2.84	250	7.81	34.20	1.17	2.55	26.70	140.0	0.499	
495	6.25	34.33	0.42	3.00	300	7.27	34.22	0.95	2.70	26.79	131.5	0.566	
597	5.58	34.34	0.33	3.06	400	6.84	34.25	0.63	2.84	26.87	125.2	0.695	
795	4.60	34.42	0.37	3.14	500	6.23	34.33	0.41	3.00	27.02	112.2	0.813	
990	3.96	34.48	0.53	3.11	600	5.56	34.34	0.32	3.06	27.11	104.1	0.922	
1194	3.84	34.50	0.54	3.16	700	5.06	34.37	0.33	3.12	27.19	96.6	1.022	
					800	4.57	34.42	0.38	3.14	27.29	87.8	1.115	
					1000	3.95	34.48	0.54	3.12	27.40	78.1	1.281	
CREST; February 7, 1950; 0208 GCT; 32°30'N, 119°55.5'W; sounding, 510 fm; wind, 270°, force 2; weather, rain; sea, rough; wire angle, 0°.													90.60
0	12.33	33.46	5.44	0.71	0	12.33	33.46	5.44	0.71	25.35	263.6	0.000	
10	11.96	33.46	5.40	0.74	10	11.96	33.46	5.40	0.74	25.42	257.2	0.026	
25	11.96	33.46	5.28	0.74	20	11.95	33.46	5.34	0.74	25.42	257.1	0.052	
50	11.60	33.49	4.79	0.94	30	11.95	33.46	5.25	0.76	25.42	257.3	0.077	
75	11.16	33.51	4.48	1.16	50	11.60	33.49	4.79	0.94	25.51	249.4	0.128	
100	9.89	33.68	3.19	1.72	75	11.16	33.51	4.48	1.16	25.61	240.9	0.189	
154	8.80	34.04	1.93	2.20	100	9.89	33.68	3.19	1.72	26.96	207.3	0.245	
203	8.39	34.11	1.54	2.40	150	8.84	34.03	1.99	2.17	26.41	166.1	0.339	
252	8.00	34.17	1.35	2.48	200	8.42	34.10	1.56	2.39	26.53	155.3	0.420	
301	7.54	34.20	1.14	2.61	250	8.00	34.17	1.37	2.48	26.64	144.9	0.494	
405	6.83	34.23	0.71	2.80	300	7.56	34.20	1.15	2.60	26.73	137.1	0.564	
503	6.20	34.31	0.45	2.91	400	6.85	34.23	0.72	2.80	26.85	126.6	0.696	
607	5.64	34.34	0.33	3.06	500	6.21	34.31	0.45	2.91	27.00	113.5	0.816	
711	5.08	34.38	0.30	3.11	600	5.67	34.34	0.34	3.06	27.09	105.5	0.926	
811	4.55	34.42	0.35	3.10	700	5.12	34.38	0.31	3.11	27.19	96.6	1.027	
					800	4.59	34.41	0.34	3.10	27.28	88.9	1.120	
CREST; February 6, 1950; 1955 GCT; 32°06'N, 120°38'W; sounding, 2,150 fm; wind, 280°, force 2; weather, fog; sea, moderate; wire angle, 24°.													90.70
0	14.04	33.17	5.44	0.50	0	14.04	33.17	5.44	0.50	24.78	317.5	0.000	
10	13.95	33.21	5.48	0.54	10	13.95	33.21	5.48	0.54	24.84	313.0	0.031	
23	13.88	33.21	5.47	0.50	20	13.90	33.21	5.48	0.51	24.85	312.1	0.063	
50	13.25	33.15	5.45	0.56	30	13.81	33.20	5.48	0.50	24.86	311.4	0.094	
72	11.83	33.13	5.42	0.78	50	13.25	33.15	5.45	0.56	24.93	304.6	0.156	
99	10.86	33.28	4.91	1.04	75	11.65	33.13	5.40	0.81	25.22	277.4	0.228	
147	9.50	–	–	–	100	10.80	33.29	4.85	1.06	25.50	251.3	0.294	
195	8.40	33.95	2.86	2.07	150	9.42	33.71	3.58	1.74	26.06	198.8	0.407	
248p	7.82	34.05	2.12	2.40	200	8.30	33.96	2.75	2.10	26.44	164.0	0.498	
315p	6.82	34.16	1.12	2.79	250	7.77	34.06	2.07	2.43	26.59	149.7	0.576	
388p	6.26	34.16	0.93	2.88	300	7.00	34.14	1.29	2.75	26.76	133.9	0.647	
569p	5.38	34.31	0.37	3.12	400	6.20	34.16	0.88	2.90	26.89	122.5	0.775	
708p	4.84	34.38	0.30	3.12	500	5.70	34.24	0.50	3.10	27.01	112.2	0.893	
898p	4.44	34.45	0.39	3.28	600	5.25	34.33	0.34	3.12	27.14	101.0	0.999	
					700	4.85	34.38	0.30	3.12	27.22	93.3	1.096	
					800	4.60	34.41	0.32	3.18	27.28	89.0	1.187	
					1000	(4.25)	(34.48)			(27.37)	(81.6)	(1.358)	

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

90.80 CREST; February 6, 1950; 1342 GCT; 31°45'N, 121°19'W; sounding, 2,190 fm; wind, 200°, force 5; weather, drizzle; sea, rough; wire angle, 12°.

0	13.40	33.17	5.25	0.48	0	13.40	33.17	5.25	0.48	24.92	305.0	0.000
10	13.13	-	5.60	0.50	10	13.13	33.20	5.60	0.50	25.00	297.1	0.030
25	12.78	33.22	5.58	0.50	20	12.85	33.21	5.59	0.50	25.06	292.0	0.059
49	12.64	33.24	5.37	0.63	30	12.74	33.23	5.55	0.50	25.09	288.8	0.089
78	11.60	33.19	5.05	0.86	50	12.62	33.24	5.37	0.63	25.13	286.2	0.146
107	9.88	33.40	3.72	1.55	75	11.85	33.19	5.10	0.84	25.24	276.3	0.216
164	8.58	33.80	3.16	1.83	100	10.10	33.34	4.15	1.41	25.66	236.0	0.280
214	7.82	33.98	2.43	2.06	150	8.84	33.73	3.30	1.78	26.17	188.2	0.387
319	6.52	34.07	1.49	2.53	200	8.00	33.95	2.65	1.99	26.47	160.3	0.474
429	5.48	34.07	1.04	2.68	250	7.34	34.04	2.00	2.25	26.64	145.1	0.550
534	5.00	34.16	0.57	2.90	300	6.74	34.06	1.58	2.47	26.74	136.3	0.620
639	5.02	34.31	0.29	2.93	400	5.68	34.07	1.17	2.64	26.88	123.3	0.750
845	4.22	34.42	0.45	3.01	500	5.10	34.12	0.69	2.82	26.99	113.4	0.869
1055	3.68	34.51	0.63	3.98	600	5.00	34.27	0.34	2.93	27.12	102.2	0.976
1258	3.24	34.52	0.86	2.99	700	4.88	34.35	0.30	2.95	27.20	96.0	1.075
					800	4.41	34.40	0.41	2.99	27.29	87.4	1.167
					1000	3.82	34.49	0.57	2.98	27.42	75.8	1.330

90.90 CREST; February 6, 1950; 0729 GCT; 31°25'N, 122°00'W; sounding, 2,250 fm; wind, 200°, force 4; weather, cloudy; sea, rough; wire angle, 29°.

0	14.70	33.33	5.29	0.42	0	14.70	33.33	5.29	0.42	24.77	318.8	0.000
9	14.64	33.33	5.31	0.42	10	14.64	33.33	5.31	0.42	24.78	317.9	0.032
27	14.62	33.33	5.37	0.42	20	14.62	33.33	5.35	0.42	24.79	317.7	0.063
54	14.60	33.33	5.38	0.43	30	14.61	33.33	5.37	0.42	24.79	317.8	0.095
81	14.59	33.33	5.30	0.43	50	14.60	33.33	5.38	0.43	24.79	318.1	0.159
108	14.14	33.33	5.35	0.54	75	14.60	33.33	5.31	0.42	24.79	318.8	0.239
163	11.51	33.53	4.75	0.84	100	14.43	33.33	5.35	0.49	24.83	316.0	0.318
218	9.28	33.84	4.33	1.27	150	12.23	33.46	4.87	0.77	25.37	265.1	0.463
327	7.55	34.04	2.59	2.08	200	9.78	33.76	4.49	1.10	26.04	202.0	0.581
432	6.34	34.11	1.17	2.62	250	8.60	33.94	4.01	1.54	26.37	170.8	0.673
544	5.26	34.18	0.71	2.89	300	7.87	34.01	3.26	1.91	26.54	155.7	0.755
651	5.05	34.31	0.29	3.02	400	6.75	34.09	1.45	2.48	26.76	135.7	0.901
871	4.08	34.42	0.43	3.06	500	5.54	34.14	0.89	2.80	26.95	117.6	1.027
1088	3.60	34.49	0.71	3.02	600	5.13	34.26	0.45	2.97	27.10	104.6	1.138
1300	3.10	34.54	0.94	2.95	700	4.85	34.34	0.30	3.04	27.19	96.2	1.239
					800	4.34	34.40	0.37	3.06	27.30	86.7	1.330
					1000	3.79	34.46	0.60	3.04	27.40	77.6	1.494

90.100 CREST; February 6, 1950; 0116, 0127 GCT; 31°05'N, 122°40'W; sounding, 2,225 fm; wind, 200°, force 3; weather, drizzle; sea, rough; wire angle, 10°, 10°.

0	14.85	33.28	5.42a)	0.41	0	14.85	33.28	5.42	0.41	24.70	325.4	0.000
10	14.59	33.28	5.20	0.42	10	14.59	33.28	5.20	0.42	24.76	320.5	0.032
24	14.58	33.28	5.55	0.42	20	14.58	33.28	5.48	0.42	24.76	320.7	0.064
					30	14.57	33.28	5.55	0.43	24.76	320.8	0.096
49	14.55	33.28	5.49	0.46	50	14.55	33.28	5.49	0.46	24.76	320.8	0.161
72	14.55	33.31	5.45	0.45	75	14.54	33.31	5.45	0.45	24.78	319.3	0.241
96	13.01	33.16	5.45	0.56	100	12.74	33.16	5.44	0.58	25.04	295.5	0.317
149	11.02	33.48	4.93	0.86	150	11.00	33.49	4.92	0.87	25.62	240.9	0.451
197	9.48	33.80	4.49	1.26	200	9.39	33.82	4.43	1.31	26.15	191.2	0.560
294	7.82	34.05	2.28	2.16	250	8.45	33.98	3.25	1.92	26.43	165.7	0.649
396	6.66	34.12	1.28	2.56	300	7.74	34.06	2.20	2.19	26.60	150.3	0.727
494	6.03	34.22	0.57	2.88	400	6.63	34.12	1.24	2.58	26.80	121.8	0.863
597	5.72	34.33	0.35	2.89	500	6.01	34.23	0.54	2.88	26.97	116.8	0.983
798	4.68	34.40	0.35	2.99	600	5.70	34.33	0.35	2.89	27.08	106.8	1.095
994	4.02	34.49	0.53	2.96	700	5.15	34.38	0.35	2.96	27.19	97.0	1.196
1197	3.48	34.53	0.75	2.90	800	4.66	34.42	0.35	2.99	27.28	88.9	1.289
					1000	4.00	34.49	0.55	2.96	27.40	77.9	1.456

a) Alternate value, 5.62 ml/L, not used in interpolation.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

CREST; February 5, 1950; 1903 GCT; 30°45'N, 123°20'W; sounding, 2,200 fm; wind, 220°, force 2; weather, fog in patches; sea, rough; wire angle, 6°. 90.110

0	14.89	33.31	5.35	0.43	0	14.89	33.31	5.35	0.43	24.71	324.4	0.000
10	14.76	33.33	5.37	0.42	10	14.76	33.33	5.37	0.42	24.76	320.1	0.032
25	14.72	33.33	5.26	0.44	20	14.73	33.33	5.30	0.43	24.76	319.9	0.064
50	14.60	33.28	5.23	0.46	30	14.70	33.32	5.25	0.45	24.76	320.3	0.096
75	14.56	33.31	5.23	0.47	50	14.60	33.28	5.23	0.46	24.75	322.0	0.160
99	13.29	33.20	5.32	0.56	75	14.56	33.31	5.23	0.47	24.78	319.5	0.241
153	11.91	33.22	4.92	0.76	100	13.29	33.20	5.32	0.56	24.96	303.0	0.318
202	9.30	33.53	3.69	1.64	150	12.00	33.22	4.96	0.74	25.23	278.6	0.464
300	7.58	34.02	2.47	2.20	200	9.34	33.51	3.74	1.62	25.92	213.3	0.587
402	6.64	34.13	1.17	2.64	250	8.21	33.88	3.07	1.94	26.39	169.5	0.683
498	6.10	34.23	0.58	2.91	300	7.58	34.02	2.47	2.20	26.59	150.8	0.763
600	5.62	34.31	0.32	3.06	400	6.67	34.13	1.20	2.64	26.80	131.6	0.904
799	4.65	34.42	0.32	3.11	500	6.08	34.23	0.57	2.91	26.96	117.6	1.029
996	3.97	34.47	0.52	3.11	600	5.62	34.31	0.32	3.06	27.08	106.9	1.141
1200	3.47	34.51	0.76	3.06	700	5.12	34.38	0.32	3.10	27.19	96.6	1.243
					800	4.64	34.42	0.32	3.12	27.28	88.9	1.335
					1000	3.95	34.47	0.54	3.11	27.39	78.7	1.503

CREST; February 5, 1950; 1250 GCT; 30°24.5'N, 124°00'W; sounding, 2,375 fm; wind, 210°, force 2; weather, drizzle; sea, rough; wire angle, 0°. 90.120

0	15.23	33.39	5.13a)	0.38	0	15.23	33.39	5.13	0.38	24.70	325.3	0.000
10	15.17	-	5.18a)	-	10	15.17	33.39	5.18	0.39	24.71	324.4	0.032
25	15.13	33.39	5.06a)	0.41	20	15.14	33.39	5.15	0.40	24.72	324.2	0.065
50	15.04	33.39	5.20a)	0.44	30	15.10	33.39	5.08	0.42	24.73	323.5	0.097
75	15.00	33.37	5.27	0.44	50	15.04	33.39	5.20	0.44	24.74	322.7	0.162
100	13.28b)	33.31	5.43	0.58	75	15.00	33.37	5.27	0.44	24.74	324.1	0.243
154	10.98	33.44	4.57	1.01	100	13.28	33.31	5.43	0.58	25.05	295.0	0.320
204	9.07	33.75	3.72	1.63	150	11.14	33.42	4.61	1.00	25.54	248.8	0.456
303	7.60	34.00	2.28	2.24	200	9.21	33.74	3.75	1.57	26.12	194.2	0.567
406	6.46	34.07	1.48	2.52	250	8.24	33.90	3.00	2.05	26.40	168.5	0.658
505	5.64	34.13	0.84	2.85	300	7.64	34.00	2.30	2.23	26.56	153.2	0.737
608	5.22	34.26	0.40	2.89	400	6.54	34.07	1.50	2.50	26.77	134.2	0.881
810	4.40	34.38	0.43	3.08	500	5.66	34.13	0.87	2.85	26.93	119.8	1.008
1008	3.86	34.46	0.59	3.06	600	5.25	34.25	0.42	2.88	27.07	106.9	1.122
1213	3.36	34.49	0.88	3.03	700	4.80	34.33	0.39	2.99	27.19	96.4	1.223
					800	4.44	34.38	0.41	3.08	27.27	89.3	1.316
					1000	3.89	34.46	0.57	3.06	27.39	78.8	1.484

CREST; February 11, 1950; 1210 GCT; 32°50'N, 117°31'W; sounding, 400 fm; wind, 220°, force 3; weather, drizzle; sea, moderate; wire angle, 28°. 93.30

0	13.52	33.40	5.59	0.48	0	13.52	33.40	5.59	0.48	25.07	290.3	0.000
9	13.54	33.39	5.59	0.48	10	13.54	33.39	5.59	0.48	25.06	291.8	0.029
22	13.56	33.46	5.46	0.48	20	13.55	33.45	5.46	0.48	25.10	287.7	0.058
44	12.86	33.51	5.41	0.64	30	13.54	33.48	5.45	0.51	25.13	285.8	0.087
66	11.20	33.55	4.52	1.15	50	12.47	33.52	5.35	0.74	25.37	262.8	0.142
87	9.95	33.60	3.41	1.73	75	10.52	33.57	4.10	1.40	25.77	225.6	0.203
132	9.14	33.96	2.27	2.08	100	9.58	33.65	2.85	1.89	25.99	204.9	0.256
173	8.96	34.00	2.08	2.20	150	9.05	33.98	2.17	2.14	26.33	172.9	0.351
213	8.60	34.04	1.94	2.26	200	8.73	34.02	2.00	2.24	26.42	165.9	0.435
254	8.30	34.13	1.53	2.43	250	8.32	34.12	1.58	2.41	26.56	153.3	0.516
340	7.46	34.18	1.04	2.69	300	7.86	34.16	1.27	2.59	26.66	144.4	0.590
436	6.65	34.23	0.55	2.95	400	6.94	34.20	0.70	2.88	26.82	130.2	0.727
531	5.96	34.31	0.34	3.05	500	6.18	34.28	0.39	3.02	26.98	115.2	0.850

a) Alternate values for first four levels listed in order of depth, 5.59, 5.72, 5.88 and 5.38 ml/L, not used in interpolation.

b) Alternate value, 13.17°C, not used in interpolation.

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
93.40	CREST; February 11, 1950; 1823 GCT; 32°28'N, 118°12'W; sounding, 1,050 fm; wind, 270°, force 6; weather, haze; sea, very rough; wire angle, 40°.											
0	13.19	33.44	5.74	0.49	0	13.19	33.44	5.74	0.49	25.17	280.8	0.000
7	13.15	33.44	5.70	0.50	10	13.15	33.44	5.70	0.50	25.18	280.4	0.028
22	13.15	33.46	5.75	0.51	20	13.14	33.46	5.75	0.51	25.19	279.2	0.056
46	12.89	33.49	5.62	0.60	30	13.13	33.48	5.74	0.54	25.21	277.8	0.084
69	11.16	33.48	4.34	1.28	50	12.73	33.49	5.58	0.70	25.30	270.1	0.139
92	9.71	33.66	3.37	1.74	75	10.50	33.50	4.50	1.48	25.72	230.3	0.201
138	8.99	33.96	2.33	2.10	100	9.52	33.73	3.10	1.84	26.06	197.9	0.255
183	8.26	34.07	2.02	2.24	150	8.78	33.99	2.23	2.14	26.38	168.1	0.346
275	7.68	34.18	1.21	2.55	200	8.07	34.10	1.83	2.29	26.58	150.2	0.426
363	6.86	34.23	0.75	2.75	250	7.80	34.16	1.40	2.46	26.66	142.9	0.499
454	6.33	34.27	0.48	2.93	300	7.50	34.20	1.06	2.61	26.74	136.3	0.568
541	5.92	34.31	0.37	2.99	400	6.60	34.24	0.63	2.85	26.90	122.5	0.698
732	4.93	34.42	0.36	3.09	500	6.10	34.29	0.40	2.97	27.00	113.4	0.816
932	4.20	34.45	0.51	3.07	600	5.63	34.35	0.38	3.01	27.11	104.3	0.925
1138	3.78	34.47	0.65	3.05	700	5.09	34.41	0.37	3.08	27.22	94.0	1.025
					800	4.62	34.43	0.42	3.08	27.29	87.9	1.117
					1000	4.04	34.46	0.56	3.06	27.38	80.5	1.286
93.70	CREST; February 12, 1950; 1422 GCT; 31°30'N, 120°14'W; sounding, missing; wind, 300°, force 6; weather, partly cloudy; sea, high; wire angle, 47°.											
0	13.19	33.24	5.38	0.47	0	13.19	33.24	5.38	0.47	25.02	295.4	0.000
8	13.17	33.24	5.48	0.47	10	13.17	33.24	5.48	0.47	25.02	295.7	0.029
21	13.16	33.21	5.47	0.49	20	13.16	33.21	5.47	0.49	24.99	298.1	0.059
40	12.41	33.21	5.33	0.65	30	12.70	33.21	5.37	0.54	25.09	289.4	0.089
52	12.27	33.33	5.50	0.66	50	12.30	33.32	5.49	0.66	25.25	274.3	0.145
73	12.21	33.37	5.49	0.68	75	12.17	33.38	5.45	0.69	25.32	268.1	0.213
104	11.61	33.44	5.33	0.82	100	11.85	33.43	5.34	0.80	25.42	259.1	0.279
133	9.39	33.71	3.16	1.79	150	8.99	33.83	2.79	1.89	26.23	183.1	0.389
193	8.43	33.98	2.36	2.07	200	8.30	34.00	2.30	2.09	26.47	161.0	0.475
248	7.63	34.07	1.83	2.30	250	7.60	34.08	1.81	2.30	26.63	146.0	0.552
308	7.04	34.14	1.29	2.58	300	7.11	34.13	1.35	2.54	26.74	136.1	0.622
363	6.62	34.18	0.90	2.67	400	6.35	34.21	0.69	2.75	26.91	121.4	0.751
479	5.84	34.27	0.42	2.96	500	5.71	34.29	0.39	3.00	27.05	108.5	0.866
600	5.23	34.36	0.31	3.04	600	5.23	34.36	0.31	3.04	27.16	98.7	0.970
771	4.58	34.42	0.39	3.07	700	4.85	34.40	0.32	3.05	27.24	91.8	1.065
93.80	CREST; February 12, 1950; 2035 GCT; 31°07.5'N, 120°55'W; sounding, 2,050 fm; wind, 340°, force 6; weather, cloudy; sea, very high; wire angle, 40°.											
0	14.04	33.24	5.44	0.45	0	14.04	33.24	5.44	0.45	24.84	312.2	0.000
12	14.00	33.23	5.51	0.45	10	14.01	33.23	5.49	0.45	24.84	312.8	0.031
26	14.00	33.22	5.48	0.47	20	14.00	33.22	5.50	0.46	24.83	313.8	0.062
56	14.11	33.22	5.41	0.48	30	14.01	33.22	5.48	0.47	24.83	314.0	0.094
82	12.86	33.12	5.29	0.54	50	14.08	33.22	5.42	0.46	24.82	315.9	0.157
112	12.18	33.22	5.22	0.68	75	13.65	33.12	5.33	0.50	24.83	315.3	0.236
168	9.68	33.10	3.92	1.39	100	12.49	33.19	5.28	0.62	25.11	288.6	0.311
223	8.41	33.95	2.83	1.84	150	10.37	33.13	4.35	1.16	25.45	256.9	0.448
332	7.21	34.10	1.66	2.33	200	8.84	33.80	3.20	1.65	26.23	184.0	0.558
451	6.32	34.22	0.70	2.65	250	8.06	34.00	2.42	1.99	26.50	158.3	0.643
562	5.68	34.26	0.41	2.84	300	7.51	34.06	1.89	2.19	26.63	146.8	0.719
681	5.27	34.37	0.34	2.90	400	6.67	34.18	1.10	2.51	26.84	127.9	0.857
910	4.22	34.45	0.51	2.89	500	6.02	34.24	0.52	2.75	26.97	116.1	0.979
1156	3.48	34.51	0.80	2.90	600	5.55	34.30	0.36	2.86	27.08	107.0	1.090
1434	2.92	34.56	1.06	2.88	700	5.20	34.38	0.35	2.90	27.18	97.6	1.193
					800	4.70	34.41	0.42	2.90	27.26	90.3	1.287
					1000	3.90	34.48	0.60	2.89	27.40	77.4	1.454

CREST; February 13, 1950; 0248 GCT; 30°49'N, 121°31'W; sounding, missing; wind, 360°, force 4; weather, partly cloudy; sea, high; wire angle, 37°. 93.90

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
0	15.01	33.46	5.18	0.45	0	15.01	33.46	5.18	0.45	24.80	315.7	0.000
9	14.98	33.44	5.32	0.43	10	14.98	33.44	5.31	0.43	24.79	316.9	0.031
27	14.94	33.44	5.26	0.44	20	14.95	33.44	5.29	0.43	24.80	316.5	0.063
54	14.49	33.39	5.34	0.48	30	14.91	33.44	5.26	0.44	24.81	315.8	0.095
81	14.30	33.32	5.34	0.49	50	14.55	33.40	5.32	0.47	24.86	312.0	0.158
109	13.64	33.49	5.32	0.50	75	14.35	33.33	5.35	0.49	24.85	313.6	0.236
164	10.19	33.53	4.14	1.33	100	13.87	33.46	5.34	0.50	25.05	295.2	0.312
220	8.93	33.87	2.70	1.96	150	12.45	33.51	4.56	0.91	25.37	265.7	0.452
329	6.85a)	34.04	1.95	2.40	200	10.69	33.72	3.09	1.82	25.85	219.8	0.574
435	6.06	34.13	0.97	2.73	250	8.77	33.95	2.41	2.10	26.35	171.6	0.673
545	5.65	34.25	0.43	2.96	300	7.29	34.01	2.11	2.30	26.62	147.4	0.751
650	5.11	34.31	0.32	3.03	400	6.28	34.10	1.30	2.63	26.83	128.7	0.889
865	4.26	34.43	0.48	3.09	500	5.82	34.21	0.61	2.88	26.97	115.8	1.012
1079	3.70	34.49	0.69	3.05	600	5.35	34.28	0.35	3.00	27.09	106.0	1.122
1289	3.24	34.53	0.89	3.04	700	4.89	34.34	0.35	3.04	27.19	96.6	1.224
					800	4.52	34.40	0.42	3.07	27.28	88.7	1.316
					1000	3.87	34.48	0.61	3.08	27.41	77.2	1.482

CREST; February 14, 1950; 2029 GCT; 32°11'N, 117°17'W; sounding, 650 fm; wind, 320°, force 3; weather, haze; sea, moderate; wire angle, 11°. 97.32

0	14.3	33.40	5.53	0.48	0	14.3	33.40	5.53	0.48	24.91	306.0	0.000
10	13.78	33.42	5.51	0.48	10	13.78	33.42	5.51	0.48	25.03	294.4	0.030
25	13.58	33.46	5.53	0.47	20	13.63	33.45	5.52	0.46	25.09	289.3	0.059
50	13.40	33.47	5.47	0.52	30	13.52	33.46	5.53	0.46	25.12	286.7	0.088
74	11.29	33.37	4.92	0.92	50	13.40	33.47	5.47	0.52	25.15	284.2	0.145
98	10.92	33.40	4.44	1.16	75	11.25	33.37	4.90	0.95	25.48	252.5	0.212
137p	10.46	33.57	3.55	1.50	100	10.90	33.40	4.36	1.18	25.57	245.0	0.274
155p	9.24	33.93	2.55	1.89	150	9.32	33.89	2.62	1.80	26.22	183.8	0.382
218p	8.63	34.16	1.88	2.15	200	8.82	34.13	2.10	2.12	26.49	159.2	0.467
343p	7.52	34.25	0.80	2.58	250	8.36	34.19	1.54	2.22	26.61	148.8	0.545
460p	6.37	34.28	0.42	2.81	300	7.92	34.23	1.09	2.36	26.70	140.2	0.616
578p	5.96	34.31	0.34	2.89	400	6.90	34.27	0.55	2.72	26.88	124.3	0.749
798p	4.83	34.40	0.29	2.91	500	6.23	34.29	0.38	2.85	26.99	115.1	0.868
924p	4.34	-	0.38	2.98	600	5.85	34.32	0.33	2.89	27.06	109.3	0.981
					700	5.31	34.35	0.30	2.89	27.15	101.3	1.086
					800	4.82	34.40	0.30	2.92	27.24	92.6	1.183
					1000	(4.07)						

CREST; February 14, 1950; 1603 GCT; 31°56'N, 117°50'W; sounding, 300 fm; wind, 300°, force 2; weather, fog; sea, moderate; wire angle, 5°. 97.40

0	13.88	33.49	5.41	0.48	0	13.88	33.49	5.41	0.48	25.07	290.8	0.000
10	13.71	33.49	5.49	0.47	10	13.71	33.49	5.49	0.47	25.10	287.9	0.029
25	13.73	33.49	5.53	0.50	20	13.71	33.49	5.52	0.48	25.10	288.0	0.058
50	13.02	33.44	5.12	0.70	30	13.72	33.48	5.52	0.52	25.09	289.1	0.086
75	11.35	33.44	4.19	1.25	50	13.02	33.44	5.12	0.70	25.21	278.6	0.143
99	10.44	33.57	3.66	1.61	75	11.35	33.44	4.19	1.25	25.52	249.2	0.209
153	9.32	33.91	2.71	2.02	100	10.42	33.59	3.61	1.62	25.80	222.9	0.268
202	8.74	34.09	2.08	2.14	150	9.37	33.90	2.75	2.00	26.22	183.9	0.370
251	8.32	34.17	1.70	2.29	200	8.75	34.08	2.11	2.14	26.46	161.9	0.456
301	7.83	34.22	1.25	2.46	250	8.33	34.17	1.70	2.28	26.59	149.8	0.535
351	7.24	34.27	0.78	2.80	300	7.84	34.22	1.27	2.46	26.71	139.9	0.607

a) Alternate value, 7.20°C, not used in interpolation.

SIO

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

97.50 CREST; February 14, 1950; 0950, 1005 GCT; 31°35'N, 118°30'W; sounding, 1,400 fm; wind, 340°, force 1; weather, fog; sea, moderate; wire angle, 6°, 6°.

0	13.78	33.37	5.49	0.45	0	13.78	33.37	5.49	0.45	24.99	296.7	0.000
10	13.62	33.35	5.67	0.47	10	13.62	33.35	5.67	0.47	25.01	296.3	0.029
					20	13.58	33.36	5.66	0.46	25.03	294.9	0.059
25	13.55	33.37	5.64	0.46	30	13.40	33.37	5.63	0.46	25.07	291.1	0.088
49	12.90	33.35	5.61	0.60	50	12.86	33.35	5.61	0.62	25.16	282.6	0.146
73	12.18	33.48	5.44	0.80	75	12.00	33.48	5.37	0.84	25.43	257.8	0.213
97	10.69	33.40	4.61	1.22	100	10.54	33.40	4.45	1.26	25.63	238.8	0.275
151	8.99	33.80	2.86	2.00	150	8.99	33.80	2.88	1.99	26.20	185.4	0.382
200	8.22	33.98	2.38	2.12	200	8.22	33.98	2.38	2.12	26.46	161.5	0.468
297	7.20	34.11	1.50	2.51	250	7.58	34.06	1.95	2.34	26.62	147.1	0.546
399	6.77	34.23	0.69	2.77	300	7.18	34.11	1.47	2.52	26.72	138.4	0.617
496	6.17	34.29	0.42	2.95	400	6.76	34.23	0.69	2.77	26.87	125.5	0.749
598	5.52	34.33	0.36	3.02	500	6.15	34.29	0.42	2.95	27.00	114.1	0.868
797	4.64	34.38	0.44	3.11	600	5.51	34.33	0.36	3.02	27.11	104.2	0.978
992	3.98	34.45	0.59	3.12	700	5.03	34.36	0.37	3.08	27.19	96.8	1.078
1195	3.41	34.49	0.88	3.07	800	4.63	34.38	0.44	3.11	27.25	91.5	1.172
					1000	3.97	34.45	0.61	3.12	27.37	80.4	1.344

97.60 CREST; February 14, 1950; 0337 GCT; 31°13'N, 119°11'W; sounding, 2,050 fm; wind, 340°, force 1; weather, partly cloudy; sea, rough; wire angle, 11°.

0	13.97	33.40	5.44	0.47	0	13.97	33.40	5.44	0.47	24.98	298.9	0.000
10	13.90	33.37	5.46	0.48	10	13.90	33.37	5.46	0.48	24.97	300.2	0.030
24	13.78	33.37	5.41	0.48	20	13.82	33.37	5.44	0.48	24.99	298.8	0.060
49	12.22	33.37	5.15	0.76	30	13.60	33.37	5.37	0.50	25.03	294.7	0.089
73	11.42	33.48	4.91	1.01	50	12.20	33.37	5.14	0.78	25.31	268.8	0.146
98	10.20	33.48	4.35	1.35	75	11.33	33.48	4.88	1.02	25.55	245.8	0.210
152	8.82	33.87	2.66	2.05	100	10.10	33.48	4.30	1.42	25.77	225.8	0.269
200	8.06	34.04	2.44	2.20	150	8.85	33.85	2.68	2.04	26.26	179.6	0.371
297	7.15	34.18	1.31	2.63	200	8.06	34.04	2.44	2.20	26.53	154.8	0.454
398	6.34	34.22	0.85	2.80	250	7.53	34.13	1.81	2.48	26.68	141.2	0.528
494	5.77	34.31	0.43	3.01	300	7.12	34.18	1.29	2.64	26.78	132.4	0.596
595	5.32	34.34	0.34	3.12	400	6.31	34.22	0.83	2.80	26.92	120.0	0.722
793	4.60	34.43	0.41	3.17	500	5.74	34.31	0.42	3.02	27.06	107.5	0.836
988	3.94	34.49	0.61	3.08	600	5.30	34.34	0.35	3.12	27.14	100.8	0.940
1191	3.38	34.52	0.85	3.08	700	4.96	34.39	0.38	3.15	27.22	93.9	1.037
					800	4.57	34.43	0.42	3.15	27.30	87.1	1.128
					1000	3.89	34.49	0.63	3.08	27.41	76.5	1.292

97.70 CREST; February 13, 1950; 2124 GCT; 30°52'N, 119°50'W; sounding, 2,000 fm; wind, 360°, force 3; weather, partly cloudy; sea, rough; wire angle, 20°.

0	13.30	33.35	5.53	0.49	0	13.30	33.35	5.53	0.49	25.07	289.9	0.000
10	13.10	33.31	5.66	0.48	10	13.10	33.31	5.66	0.48	25.00	289.2	0.029
24	13.04	33.33	5.65	0.51	20	13.05	33.32	5.65	0.49	25.10	287.7	0.058
46	11.85	33.46	5.52	0.76	30	12.95	33.37	5.62	0.56	25.16	282.3	0.086
69	11.48	33.53	4.89	0.99	50	11.78	33.48	5.42	0.80	25.47	253.2	0.140
92	10.57	33.53	4.38	1.25	75	11.27	33.53	4.74	1.06	25.60	241.2	0.202
142	9.12	33.78	2.95	1.86	100	10.25	33.54	4.18	1.36	25.79	223.7	0.260
187	8.30	34.00	2.26	2.07	150	8.95	33.83	2.80	1.90	26.23	182.7	0.361
276	7.26	34.10	1.48	2.44	200	8.09	34.02	2.12	2.14	26.51	156.5	0.446
372	6.68	34.21	0.92	2.67	250	7.50	34.08	1.65	2.35	26.65	144.3	0.521
460	5.89	34.21	0.51	2.86	300	7.08	34.13	1.31	2.50	26.74	135.7	0.591
559	5.31	34.31	0.48	2.91	400	6.40	34.21	0.77	2.74	26.90	122.0	0.720
750	4.65	34.38	0.42	2.95	500	5.65	34.25	0.49	2.89	27.02	110.8	0.836
					600	5.13	34.33	0.48	2.93	27.15	99.4	0.941
					700	4.79	34.36	0.43	2.95	27.21	94.0	1.038
					800	(4.50)	(34.39)			(27.27)	(89.1)	(1.129)

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

CREST; February 13, 1950; 1511 GCT; 30°31'N, 120°31'W; sounding, missing; wind, 300°, force 3; weather, partly cloudy; sea, very rough; wire angle, 20°. 97.80

0	14.81	33.44	5.31	0.49	0	14.81	33.44	5.31	0.49	24.83	313.2	0.000
9	14.75	33.44	5.34	0.49	10	14.76	33.44	5.34	0.49	24.84	312.3	0.031
23	14.78	33.48	5.29	0.51	20	14.77	33.48	5.32	0.50	24.87	309.9	0.062
51	14.82	33.46	5.29	0.50	30	14.79	33.48	5.29	0.51	24.87	310.4	0.093
74	14.82	33.44	5.33	0.52	50	14.82	33.46	5.30	0.50	24.85	312.9	0.156
102	13.37	33.45	5.34	0.62	75	14.82	33.44	5.35	0.52	24.83	315.1	0.234
154	10.63	33.57	4.43	1.27	100	13.55	33.45	5.34	0.60	25.10	289.7	0.310
205	8.88	33.82	2.90	2.06	150	10.75	33.56	4.52	1.17	25.72	231.7	0.441
307	8.47r	34.09	1.72	2.54	200	9.00	33.78	3.00	2.00	26.18	188.0	0.545
414	6.30	34.14	0.91	2.92	250	7.81	34.00	2.29	2.32	26.54	154.8	0.631
517	6.06	34.29	0.43	3.13	300	7.08	34.08	1.77	2.53	26.70	139.4	0.705
619	5.36	34.31	0.35	3.18	400	6.36	34.13	1.00	2.87	26.84	127.4	0.837
821	4.43	34.40	0.45	3.23	500	6.08	34.27	0.49	3.11	26.99	114.6	0.958
1027	3.84	34.45	0.67	3.23	600	5.51	34.31	0.35	3.18	27.09	105.8	1.068
1227	3.32	-	-	-	700	4.90	34.34	0.40	3.20	27.19	96.8	1.170
					800	4.50	34.39	0.43	3.22	27.27	89.2	1.263
					1000	3.90	34.45	0.63	3.23	27.38	79.7	1.432

CREST; February 13, 1950; 0858 GCT; 30°16'N, 121°09.5'W; sounding, 2,200 fm; wind, 360°, force 5; weather, partly cloudy; sea, high; wire angle, 21°. 97.90

0	15.25	33.53	5.34	0.43	0	15.25	33.53	5.34	0.43	24.80	316.0	0.000
10	15.19	33.51	5.39	0.43	10	15.19	33.51	5.39	0.43	24.80	315.9	0.031
28	15.11	33.48	5.45	0.46	20	15.13	33.49	5.43	0.44	24.80	316.5	0.063
56	15.13	33.49	5.42	0.47	30	15.11	33.48	5.45	0.46	24.80	317.1	0.095
85	13.82	33.48	5.39	0.48	50	15.12	33.49	5.43	0.46	24.83	317.2	0.158
113	12.80	33.54	5.22	0.65	75	15.09	33.48	5.40	0.47	24.80	317.8	0.238
170	9.96	33.58	4.22	1.39	100	13.25	33.50	5.30	0.58	25.20	280.1	0.313
226	8.60	33.87	3.30	1.85	150	10.85	33.57	4.56	1.16	25.71	232.6	0.441
340	7.20	34.06	1.85	2.42	200	9.07	33.77	3.70	1.65	26.17	189.6	0.546
447	6.20	34.16	0.82	2.86	250	8.22	33.93	2.97	1.99	26.42	165.9	0.635
561	5.51	34.27	0.41	3.01	300	7.61	34.01	2.32	2.24	26.58	152.0	0.715
670	4.98	34.33	0.40	3.07	400	6.58	34.12	1.19	2.72	26.80	131.2	0.856
894	4.20	34.40	0.51	3.09	500	5.84	34.21	0.58	2.95	26.97	116.1	0.979
1110	3.64	34.47	0.75	3.08	600	5.29	34.30	0.40	3.04	27.11	103.6	1.089
1323	3.16	34.51	0.99	3.07	700	4.84	34.34	0.42	3.08	27.19	96.1	1.189
					800	4.48	34.37	0.46	3.09	27.26	90.5	1.282
					1000	3.91	34.43	0.63	3.09	27.36	81.3	1.454

HORIZON; February 13, 1950; 0009 GCT; 31°40.5'N, 116°46.5'W; sounding, 180 fm; wind, 320°, force 2; weather, partly cloudy; sea, very high; wire angle, 5°. 100.30

0	12.89	33.49	5.97	0.65	0	12.89	33.49	5.97	0.65	25.27	271.8	0.000
10	12.53	33.44	6.05	0.66	10	12.53	33.44	6.05	0.66	25.30	269.1	0.027
25	-	33.51	4.39	1.27	20	12.51	33.48	4.67	1.16	25.33	265.9	0.054
50	10.27	33.65	3.54	1.64	30	12.15	33.55	4.15	1.40	25.46	254.3	0.080
75	9.83	33.82	3.07	1.86	50	10.27	33.65	3.54	1.64	25.88	214.9	0.127
100	9.62	33.86	2.89	1.97	75	9.83	33.82	3.07	1.86	26.08	195.9	0.178
154	8.90	34.01	2.06	2.24	100	9.62	33.86	2.89	1.97	26.15	189.9	0.226
204	8.57	34.06	1.63	2.46	150	8.95	34.00	2.12	2.22	26.38	169.9	0.316
					200	8.59	34.06	1.67	2.44	26.47	160.9	0.399

S10

CCOFI 5002

OBSERVED					INTERPOLATED					COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m
100.40 HORIZON; February 12, 1950; 1834 GCT; 31°21'N, 117°27'W; sounding, 890 fm; wind, 310°, force 3; weather, partly cloudy; sea, high; wire angle, 26°.												
0	13.73	33.13	5.70	0.56	0	13.73	33.13	5.70	0.56	24.82	314.4	0.000
9	13.66	33.33	5.71	0.57	10	13.66	33.35	5.71	0.57	25.00	296.9	0.031
23	-	33.48	5.75	0.56	20	13.65	33.48	5.75	0.57	25.10	287.5	0.060
49	13.42	33.26	5.65	0.61	30	13.65	33.47	5.75	0.56	25.10	288.6	0.089
71	11.76	33.28	4.86	1.08	50	13.40	33.26	5.62	0.61	24.99	299.6	0.147
97	10.24	33.22	3.75	1.64	75	11.42	33.28	4.72	1.17	25.38	262.2	0.218
145	9.36	33.10	2.92	2.06	100	10.10	33.21	3.64	1.68	25.56	245.7	0.281
192	8.70	34.09	2.15	2.34	150	9.30	33.10	2.82	2.09	25.60	242.0	0.403
287	7.78	34.20	1.32	2.73	200	8.60	34.11	2.05	2.38	26.51	157.5	0.503
387	6.85	34.27	0.71	3.03	250	8.17	34.17	1.62	2.60	26.62	147.5	0.579
484	6.28	34.31	0.48	3.13	300	7.70	34.21	1.24	2.78	26.72	138.5	0.651
582	5.78	34.33	0.39	3.20	400	6.75	34.28	1.66	3.05	26.91	121.4	0.781
777	4.98	34.33	0.51	3.07	500	6.20	34.32	0.45	3.15	27.01	112.7	0.898
978	4.24	34.45	0.57	3.26	600	5.72	34.33	0.38	3.20	27.08	107.0	1.008
1177	3.63	34.49	0.72	3.23	700	5.30	34.33	0.45	3.12	27.13	102.6	1.112
					800	4.90	34.33	0.52	3.08	27.18	98.6	1.213
					1000	4.16	34.46	0.60	3.26	27.36	82.5	1.394
100.50 HORIZON; February 12, 1950; 1204 GCT; 31°01'N, 118°07'W; sounding, 930 fm; wind, 320°, force 5; weather, partly cloudy; sea, high; wire angle, 21°.												
0	13.56	33.48	5.70	0.52	0	13.56	33.48	5.70	0.52	25.12	285.4	0.000
10	13.61	33.48	5.69	0.52	10	13.61	33.48	5.69	0.52	25.11	286.5	0.029
28	-	33.48	5.70	0.52	20	(13.61)	33.48	5.69	0.52	(25.11)	(286.7)	(0.057)
57	13.06	33.48	5.69	0.58	30	(13.60)	33.48	5.70	0.52	(25.11)	(287.0)	(0.086)
85	11.12	33.40	4.34	1.17	50	(13.57)	33.48	5.70	0.55	(25.12)	(287.2)	(0.143)
114	9.92	33.64	3.40	1.58	75	11.80	33.42	4.93	0.92	25.42	258.5	(0.212)
172	8.99	34.00	2.33	2.00	100	10.38	33.45	3.81	1.42	25.70	232.6	(0.273)
231	8.20	34.06	1.91	2.18	150	9.26	33.93	2.63	1.88	26.26	179.8	(0.376)
347	7.31	34.18	0.85	2.57	200	8.59	34.03	2.13	2.10	26.45	163.1	(0.461)
459	6.29	34.27	0.51	2.78	250	8.03	34.08	1.73	2.22	26.57	152.0	(0.541)
575	5.56	34.29	0.38	2.97	300	7.67	34.13	1.18	2.39	26.66	144.0	(0.614)
686	5.09	34.36	0.32	2.94	400	6.84	34.22	0.66	2.68	26.85	127.4	(0.750)
1132	3.66	34.51	0.73	2.90	500	5.99	34.28	0.46	2.86	27.01	112.7	(0.870)
1344	3.22	34.54	0.96	2.89	600	5.44	34.30	0.35	2.97	27.09	105.8	(0.979)
					700	5.04	34.37	0.32	2.94	27.19	96.4	(1.081)
					800	4.69	34.42	0.40	2.93	27.27	89.4	(1.173)
					1000	4.03	34.48	0.60	2.91	27.39	79.0	(1.342)
100.90 HORIZON; February 11, 1950; 1508 GCT; 29°40.5'N, 120°47'W; sounding, 2,100 fm; wind, 310°, force 7; weather, overcast; sea, high; wire angle, 47°.												
0	15.00	33.57	5.66	-	0	15.00	33.57	5.66	(0.50)	24.89	307.4	0.000
11	14.74	33.51	5.60	0.50	10	14.75	33.51	5.62	0.50	24.90	307.1	0.031
23	-	33.53	5.63	0.49	20	14.70	33.53	5.62	0.49	24.92	304.7	0.061
48	14.44	33.49	5.56	0.51	30	14.69	33.52	5.62	0.49	24.92	305.6	0.092
70	13.45	33.41	5.50	0.66	50	14.42	33.48	5.55	0.52	24.95	303.5	0.153
94	11.50	33.44	4.74	1.06	75	13.13	33.41	5.46	0.71	25.16	283.8	0.226
138	9.92	33.68	3.33	1.62	100	11.17	33.45	4.47	1.16	25.56	245.9	0.292
182	9.10	33.96	2.74	1.93	150	9.65	33.78	3.14	1.71	26.08	197.3	0.403
266	7.96	34.11	2.13	2.21	200	8.83	34.01	2.60	2.00	26.39	168.3	0.495
355	7.46	34.23	1.08	2.60	250	8.15	34.09	2.27	2.16	26.56	153.2	0.575
438	6.68	34.23	0.64	2.77	300	7.77	34.16	1.77	2.36	26.67	143.3	0.649
526	6.02	34.27	0.47	2.88	400	7.02	34.23	0.79	2.70	26.83	129.0	0.785
895	4.34	34.45	0.45	3.01	500	6.21	34.26	0.50	2.85	26.96	117.1	0.909
1138	3.59	34.52	0.76	3.07	600	5.55	34.32	0.45	2.93	27.09	105.6	1.020
					700	5.05	34.38	0.45	2.97	27.20	95.8	1.121
					800	4.66	34.42	0.45	2.99	27.28	89.1	1.213
					1000	4.00	34.48	0.55	3.04	27.40	78.6	1.381

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

HORIZON; February 11, 1950; 0838 GCT; 29°20.5'N, 121°27'W; sounding, 2,350 fm; wind, 320°, force 6; weather, drizzle; sea, very rough; wire angle, 35°. 100.100

0	14.69	33.40	5.30	0.49	0	14.69	33.40	5.30	0.49	24.83	313.3	0.000
9	15.11	33.51	5.52	0.59	10	15.11	33.51	5.54	0.49	24.82	314.4	0.031
24	-	33.49	5.56	0.47	20	15.11	33.50	5.56	0.48	24.81	315.5	0.063
48	13.86	33.40	5.52	0.54	30	15.10	33.47	5.55	0.48	24.79	317.6	0.095
71	13.56	33.24	5.70	0.61	50	13.85	33.39	5.53	0.55	24.99	298.7	0.156
94	13.68	33.49	5.66	0.52	75	13.55	33.24	5.70	0.60	24.94	304.5	0.232
149	12.07	33.60	4.95	0.95	100	13.68	33.51	5.63	0.53	25.12	287.9	0.306
189	9.58	33.64	3.50	1.78	150	12.03	33.60	4.95	0.98	25.52	241.2	0.438
281	8.51	34.14	1.74	2.49	200	9.35	33.66	3.20	1.94	26.03	202.4	0.549
371	7.67	34.20	0.97	2.78	250	8.79	33.95	2.17	2.35	26.35	172.8	0.643
465	6.68	34.27	0.51	2.98	300	8.35	34.16	1.53	2.55	26.58	151.7	0.723
559	5.72	34.29	0.43	3.03	400	7.35	34.22	0.80	2.85	26.78	134.2	0.866
759	4.76	34.45	0.39	3.18	500	6.29	34.28	0.47	3.01	26.97	116.6	0.992
959	4.05	34.49	0.58	3.20	600	5.48	34.31	0.41	3.05	27.09	105.4	1.103
1162	3.56	34.52	0.78	3.20	700	5.01	34.40	0.38	3.14	27.22	93.9	1.202
					800	4.61	34.46	0.41	3.19	27.31	85.6	1.292
					1000	3.91	34.50	0.63	3.20	27.42	76.2	1.454

HORIZON; February 11, 1950; 0225 GCT; 29°00.5'N, 122°07'W; sounding, 2,550 fm; wind, 310°, force 4; weather, rain showers; sea, rough; wire angle, 35°. 100.110

0	16.32	33.80	5.39	0.44	0	16.32	33.80	5.39	0.44	24.78	318.3	0.000
9	16.36	33.79	5.41	-	10	16.35	33.79	5.40	0.44	24.76	320.2	0.032
21	16.34	33.81	5.34	0.43	20	16.35	33.81	5.34	0.43	24.77	319.1	0.064
45	16.27	33.78	5.32	0.44	30	16.30	33.80	5.32	0.44	24.78	319.1	0.096
64	16.31	33.78	5.32	0.44	50	16.27	33.78	5.32	0.44	24.77	320.5	0.160
88	16.02	33.72	5.32	-	75	16.30	33.75	5.32	0.44	24.74	324.1	0.240
131	14.04	33.72	5.22	0.56	100	15.99	33.71	5.32	0.46	24.78	321.0	0.321
172	11.40	33.55	4.72	1.04	150	12.68	33.67	5.08	0.72	25.45	258.1	0.465
254	8.43	33.96	3.31	1.89	200	9.90	33.73	4.30	1.39	26.00	205.8	0.582
342	7.26	34.09	1.79	2.46	250	8.53	33.95	3.40	1.86	26.39	169.0	0.676
425	6.47	34.16	1.02	2.80	300	7.75	34.04	2.42	2.21	26.58	151.8	0.755
509	5.85	34.19	0.61	3.03	400	6.68	34.14	1.19	2.72	26.81	131.0	0.897
681	5.14	34.36	0.36	3.12	500	5.90	34.19	0.66	3.01	26.95	118.3	1.022
866	4.52	34.43	0.41	3.17	600	5.41	34.28	0.41	3.09	27.08	106.8	1.134
1058	3.86	34.47	0.65	3.14	700	5.09	34.37	0.35	3.13	27.19	97.0	1.236
					800	4.77	34.41	0.37	3.16	27.26	91.1	1.330
					1000	4.07	34.47	0.58	3.16	27.38	80.2	1.501

HORIZON; February 10, 1950; 2012 GCT; 28°40.5'N, 122°46'W; sounding, 2,400 fm; wind, 240°, force 3; weather, partly cloudy; sea, moderate; wire angle, 30°. 100.120

0	16.43	33.75	5.37	0.45	0	16.43	33.75	5.37	0.45	24.71	324.9	0.000
9	16.38	33.82	5.37	0.46	10	16.39	33.82	5.37	0.46	24.77	319.0	0.032
22	16.35	33.69	5.41	0.45	20	16.35	33.69	5.41	0.46	24.68	327.9	0.065
48	16.37	33.82	5.37	0.44	30	16.35	33.72	5.41	0.45	24.70	326.1	0.097
70	16.37	33.78	5.40	0.45	50	16.37	33.82	5.37	0.44	24.77	320.0	0.162
96	14.72	33.68	5.60	0.45	75	16.39	33.76	5.45	0.45	24.73	325.1	0.242
143	13.84	33.88	5.15	0.66	100	14.62	33.68	5.59	0.46	25.06	294.2	0.320
190	10.13	33.69	4.47	1.36	150	13.58	33.87	5.05	0.74	25.47	260.5	0.458
282	8.08	34.00	3.18	2.07	200	9.80	33.71	4.34	1.47	26.00	205.9	0.576
379	6.67	34.09	1.74	2.68	250	8.64	33.92	3.66	1.85	26.35	173.0	0.670
472	5.90	34.18	0.87	3.04	300	7.76	34.02	2.89	2.18	26.56	153.4	0.751
564	5.56	34.29	0.44	3.18	400	6.43	34.10	1.51	2.79	26.81	130.5	0.893
747	4.64	34.42	0.41	3.26	500	5.81	34.21	0.69	3.10	26.97	115.7	1.016
932	4.14	34.46	0.57	3.25	600	5.40	34.32	0.42	3.21	27.11	103.7	1.126
1116	3.62	34.52	0.92	3.21	700	4.84	34.39	0.41	3.26	27.23	92.5	1.224
					800	4.48	34.43	0.43	3.26	27.31	85.9	1.313
					1000	3.95	34.48	0.70	3.24	27.40	78.1	1.477

SIO

CCOFI 5002

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
105.35	HORIZON; January 31, 1950; 1152 GCT; 30°39'N, 116°33'W; sounding, 1,080 fm; wind, 320°, force 4; weather, partly cloudy; sea, rough; wire angle, 30°.											
0	13.03	33.51	5.81	0.56	0	13.03	33.51	5.81	0.56	25.25	273.0	0.000
9	13.06	33.51	5.75	0.53	10	13.06	33.51	5.75	0.53	25.25	273.9	0.027
21	13.02	33.51	5.77	0.53	20	13.04	33.51	5.77	0.53	25.25	273.6	0.055
45	12.00	33.48	4.94	0.93	30	12.94	33.50	5.67	0.59	25.26	272.6	0.082
65	11.40	33.49	4.57	1.14	50	11.88	33.48	4.81	0.98	25.45	254.8	0.135
89	10.55	33.58	3.88	1.49	75	11.05	33.51	4.30	1.29	25.63	239.0	0.196
132	9.34	33.86	3.04	1.90	100	10.15	33.65	3.58	1.60	25.89	214.0	0.253
175	8.62	34.01	2.67	1.87r	150	8.99	33.94	2.89	(2.01)	26.31	174.9	0.350
264	7.85	34.14	1.65	2.43	200	8.39	34.05	2.43	(2.23)	26.49	158.6	0.433
355	7.26	34.27	0.84	2.67	250	7.95	34.12	1.83	(2.39)	26.61	147.8	0.511
444	6.78	34.34	0.46	2.98	300	7.59	34.19	1.26	2.52	26.72	138.4	0.582
534	6.16	34.35	0.31	3.10	400	7.00	34.32	0.63	2.84	26.91	122.0	0.712
718	5.15	34.42	0.29	3.05a)	500	6.40	34.35	0.34	3.08	27.01	113.0	0.829
845p	4.55	34.43	0.38	2.95	600	5.75	34.37	0.30	3.10	27.11	104.5	0.938
909	4.43	34.45	0.39	2.93	700	5.23	34.41	0.30	3.06	27.20	95.8	1.038
					800	4.81	34.43	0.37	2.98	27.27	90.3	1.131
					1000	(4.11)	(34.46)			(27.37)	(81.4)	(1.304)
110.35	HORIZON; February 8, 1950; 0647 GCT; 29°46.5'N, 116°00'W; sounding, 950 fm; wind, 010°, force 5; weather, partly cloudy; sea, very rough; wire angle, 36°.											
0	14.45	33.62	5.56	0.43	0	14.45	33.62	5.56	0.43	25.05	292.7	0.000
9	14.49	33.60	5.57	0.45	10	14.48	33.60	5.57	0.45	25.02	295.0	0.029
25	14.50	33.62	5.57	0.45	20	14.49	33.62	5.56	0.45	25.04	294.1	0.059
48	13.87	33.58	5.50	0.48	30	14.48	33.62	5.55	0.46	25.04	294.2	0.088
70	13.52	33.54	5.60	0.52	50	13.82	33.58	5.51	0.48	25.15	284.3	0.146
94	11.06	33.55	4.12	1.25	75	13.48	33.54	5.35	0.75	25.19	281.2	0.217
139	9.54	33.84	2.95	1.68	100	10.75	33.56	3.85	1.33	25.72	230.6	0.281
185	8.98	34.05	2.53	1.92	150	9.40	33.92	2.85	1.75	26.23	183.0	0.384
275	7.70	34.14	1.50	2.32	200	8.75	34.07	2.38	1.99	26.45	162.6	0.470
363	7.13	34.23	0.91	2.63	250	7.98	34.12	1.78	2.21	26.61	148.4	0.549
457	6.58	34.31	0.41	2.83	300	7.50	34.16	1.34	2.41	26.71	139.3	0.620
548	5.95	34.38	0.31	2.86	400	6.93	34.26	0.68	2.73	26.87	125.5	0.753
732	4.98	34.43	0.33	2.92	500	6.29	34.35	0.33	2.85	27.02	111.5	0.871
939	4.32	34.46	0.46	2.92	600	5.61	34.40	0.32	2.87	27.15	100.3	0.977
1140	4.09	34.27r	0.69	2.66	700	5.11	34.43	0.34	2.91	27.23	92.9	1.074
					800	4.71	34.44	0.37	2.92	27.29	88.2	1.164
					1000	4.18	(34.47)	0.50	2.86	(27.37)	(81.5)	(1.334)
110.40	HORIZON; February 8, 1950; 1040 GCT; 29°36.5'N, 116°19.5'W; sounding, 1,300 fm; wind, 300°, force 5; weather, partly cloudy; sea, very rough; wire angle, 39°.											
0	14.32	33.54	5.56	0.51	0	14.32	33.54	5.56	0.51	25.01	295.7	0.000
9	14.36	33.55	5.58	0.50	10	14.36	33.55	5.58	0.50	25.01	296.1	0.030
24	14.35	-	5.62	0.50	20	14.36	33.55	5.62	0.50	25.01	296.6	0.062
46	14.32	33.54	5.57	0.52	30	14.35	33.54	5.62	0.50	25.01	296.5	0.098
70	14.02	33.51	5.61	0.52	50	14.30	33.54	5.58	0.52	25.02	296.7	0.163
92	11.62	33.40	4.78	1.04	75	13.91	33.48	5.37	0.66	25.05	294.0	0.237
136	9.53	33.69	3.67	1.72	100	10.75	33.40	4.58	1.20	25.59	242.4	0.304
182	9.08	33.96	2.50	2.09	150	9.40	33.80	3.33	1.87	26.13	191.9	0.413
271	7.82	34.08	2.06	2.33	200	8.84	34.01	2.37	2.16	26.39	168.6	0.502
358	6.68	34.11	1.27	2.65	250	8.10	34.07	2.18	2.28	26.55	153.9	0.583
450	6.11	34.24	0.63	3.03	300	7.39	34.09	1.84	2.42	26.67	142.9	0.657
539	5.79	34.33	0.45	3.10	400	6.38	34.17	0.87	2.87	26.87	124.8	0.791
728	4.96	34.43	0.39	3.17	500	5.95	34.29	0.50	3.08	27.02	111.5	0.910
921	4.22	34.48	0.66	3.15	600	5.53	34.37	0.42	3.13	27.13	101.6	1.016
1124	3.62	34.52	0.78	3.14	700	5.07	34.42	0.40	3.16	27.23	93.0	1.113
					800	4.67	34.45	0.49	3.16	27.30	86.9	1.203
					1000	3.95	34.50	0.75	3.15	27.42	76.6	1.366

a) Alternate value, 3.24 μg at/L, not used in interpolation.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

HORIZON; February 8, 1950; 1653 GCT; 29°16.5'N, 116°59'W; sounding, 2,200 fm; wind, 330°, force 5; weather, partly cloudy; sea, very rough; wire angle, 17°. 110.50

0	15.52	33.71	5.62	0.41	0	15.52	33.71	5.62	0.41	24.89	307.7	0.000	
9	15.56	33.71	5.60	0.40	10	15.56	33.71	5.60	0.40	24.88	308.8	0.031	
29	15.58	33.71	5.48	0.40	20	15.58	33.71	5.49	0.40	24.87	309.9	0.062	
58	15.56	33.69	5.48	0.40	30	15.58	33.71	5.48	0.40	24.87	310.5	0.093	
86	14.62	33.60	5.50	0.43	50	15.58	33.70	5.48	0.40	24.86	311.8	0.155	
115	12.49	33.54	4.49	0.99	75	15.15	33.64	5.50	0.42	24.91	307.5	0.232	
173	9.60	33.75	3.82	1.49	100	13.67	33.56	4.98	0.63	25.16	283.9	0.306	
230	9.14	34.15	1.85	2.16	150	10.19	33.64	4.08	1.30	25.88	216.3	0.432	
344	7.96	34.28	0.88	2.53	200	9.36	33.93	3.15	1.80	26.25	182.3	0.531	
455	6.52	34.23	0.77	2.73	250	8.95	34.20	1.50	2.25	26.52	157.1	0.616	
570	5.74	34.27	0.39	2.85	300	8.44	34.26	1.10	2.42	26.65	145.8	0.692	
680	5.26	34.38	0.37	2.94	400	7.27	34.26	0.80	2.64	26.82	130.2	0.829	
905	4.36	34.47	0.50	3.08	500	6.15	34.23	0.65	2.77	26.95	118.5	0.954	
1122	3.64	34.52	0.73	2.94	600	5.58	34.30	0.38	2.78	27.07	107.4	1.067	
1333	3.18	34.56	0.96	2.96	700	5.18	34.39	0.40	2.95	27.19	96.6	1.169	
					800	4.78	34.44	0.45	3.01	27.28	89.1	1.261	
					1000	4.02	34.49	0.62	3.03	27.40	78.0	1.429	

HORIZON; February 8, 1950; 2333 GCT; 28°56.5'N, 117°39'W; sounding, 2,100 fm; wind, 350°, force 5; weather, partly cloudy; sea, very rough; wire angle, 23°. 110.60

0	15.30	33.69	5.50	0.44	0	15.30	33.69	5.50	0.44	24.92	304.9	0.000	
9	15.34	33.69	5.48	0.47	10	15.34	33.69	5.47	0.47	24.91	306.1	0.031	
28	15.31	33.69	5.51	0.46	20	15.34	33.69	5.50	0.47	24.91	306.4	0.061	
56	15.02	33.68	5.41	0.46	30	15.31	33.69	5.51	0.46	24.92	305.8	0.092	
84	12.19	33.58	4.29	1.06	50	15.07	33.68	5.44	0.46	24.96	302.1	0.153	
112	10.94	33.71	3.80	1.34	75	13.30	33.60	4.50	0.90	25.27	273.3	0.225	
168	9.31	33.96	2.99	1.75	100	11.29	33.64	3.98	1.23	25.68	234.1	0.288	
224	8.56	34.12	2.08	2.08	150	9.67	33.89	3.27	1.63	26.16	189.5	0.394	
337	7.34	34.25	0.87	2.56	200	8.85	34.08	2.44	1.95	26.44	163.5	0.482	
447	6.30	34.26	0.57	2.74	250	8.25	34.17	1.73	2.21	26.60	148.7	0.561	
663p	5.07	34.39	0.41	2.91	300	7.72	34.23	1.17	2.43	26.73	137.3	0.632	
894p	4.42	34.46	0.46	2.90	400	6.71	34.24	0.65	2.68	26.88	124.0	0.762	
1111p	3.66	34.54	0.75	2.93	500	5.90	34.29	0.48	2.80	27.03	110.8	0.880	
					600	5.34	34.36	0.40	2.88	27.15	99.9	0.985	
					700	4.94	34.40	0.42	2.91	27.23	92.9	1.081	
					800	4.67	34.43	0.45	2.90	27.27	89.5	1.172	
					1000	4.04	34.50	0.60	2.92	27.41	77.6	1.339	

HORIZON; February 9, 1950; 0519 GCT; 28°36.5'N, 118°18'W; sounding, 1,750 fm; wind, 330°, force 4; weather, partly cloudy; sea, very rough; wire angle, 28°. 110.70

0	14.18	33.38	5.67	0.46	0	14.18	33.38	5.67	0.46	24.92	304.9	0.000	
9	14.19	33.32	5.62	0.47	10	14.19	33.32	5.63	0.46	24.86	310.5	0.031	
27	13.47	33.24	5.72	0.49	20	14.18	33.24	5.69	0.47	24.81	315.5	0.062	
54	13.06	33.25	5.66	0.57	30	13.40	33.24	5.72	0.48	24.97	300.6	0.093	
79	11.99	33.19	5.22	0.72	50	13.12	33.25	5.69	0.54	25.04	294.8	0.152	
106	11.06	33.37	5.04	0.92	75	12.22	33.19	5.27	0.69	25.16	283.0	0.225	
158	9.26	33.57	3.63	1.56	100	11.25	33.31	5.10	0.87	25.44	257.4	0.292	
210	8.47	33.95	2.98	1.79	150	9.45	33.54	3.78	1.47	25.92	212.0	0.410	
317	7.71	34.16	1.48	2.29	200	8.57	33.91	3.09	1.76	26.35	171.5	0.505	
415	7.06	34.29	0.69	2.57	250	8.12	34.05	2.44	1.96	26.53	155.6	0.587	
521	6.14	34.34	0.38	2.73	300	7.80	34.14	1.68	2.22	26.65	145.1	0.662	
622	5.58	34.39	0.31	2.90	400	7.19	34.27	0.78	2.54	26.84	128.2	0.799	
832	4.51	34.41	0.41	2.99	500	6.29	34.33	0.42	2.70	27.01	113.0	0.920	
1042	3.86	34.50	0.67	2.90	600	5.70	34.38	0.32	2.87	27.12	103.1	1.028	
1249	3.34	34.54	0.88	3.00	700	5.13	34.40	0.35	2.96	27.21	95.2	1.127	
					800	4.65	34.41	0.40	2.99	27.27	89.7	1.219	
					1000	3.98	34.48	0.62	2.91	27.40	78.4	1.387	

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

110.80 HORIZON; February 9, 1950; 1132 GCT; 28°16.5'N, 118°57.5'W; sounding, 2,000 fm; wind, 330°, force 4; weather, partly cloudy; sea, very rough; wire angle, 34°.

0	16.29	33.84	5.40	0.42	0	16.29	33.84	5.40	0.42	24.81	315.2	0.000
9	16.34	33.84	5.31	0.45	10	16.34	33.84	5.31	0.45	24.80	316.6	0.032
25	16.32	33.83	5.38	0.43	20	16.33	33.83	5.35	0.44	24.80	316.8	0.063
50	16.34	33.84	5.40	0.44	30	16.32	33.83	5.38	0.43	24.79	317.5	0.095
74	16.33	33.84	5.38	0.43	50	16.34	33.84	5.40	0.44	24.80	317.8	0.159
98	14.74	33.88	5.47	0.45	75	16.32	33.84	5.38	0.43	24.80	318.0	0.238
147	11.94	33.58	4.61	1.06	100	14.66	33.88	5.47	0.45	25.20	280.4	0.313
196	9.72	33.46	3.30	1.80	150	11.75	33.56	4.55	1.10	25.54	249.0	0.446
293	8.76	34.27	1.46	2.47	200	9.64	33.46	3.22	1.84	25.83	221.7	0.563
387	7.92	34.26	0.88	2.80	250	9.15	33.96	2.12	2.26	26.30	177.8	0.663
485	6.64	-	0.63	2.93	300	8.72	34.27	1.39	2.50	26.61	149.2	0.744
580	5.86	34.36	0.41	3.06	400	7.75	34.26	0.85	2.82	26.75	137.1	0.887
773	5.12	34.45	0.36	3.10	500	6.50	34.31	0.60	2.95	26.97	117.2	1.015
967	4.22	-	0.61	3.16	600	5.77	34.37	0.40	3.07	27.11	104.7	1.126
1167	3.58	34.54	0.82	3.13	700	5.41	34.41	0.36	3.09	27.18	98.3	1.227
					800	5.00	34.46	0.38	3.11	27.27	90.4	1.321
					1000	4.08	34.51	0.65	3.16	27.41	77.4	1.489

110.90 HORIZON; February 9, 1950; 1745 GCT; 27°56.5'N, 119°36'W; sounding, 2,275 fm; wind, 340°, force 4; weather, partly cloudy; sea, very rough; wire angle, 16°.

0	15.84	33.71	5.48	0.46	0	15.84	33.71	5.48	0.46	24.81	314.8	0.000
10	15.88	33.71	5.48	0.45	10	15.88	33.71	5.48	0.45	24.80	316.0	0.032
29	15.86	33.71	5.48	0.45	20	15.88	33.71	5.48	0.45	24.80	316.3	0.063
57	15.78	33.71	5.47	0.44	30	15.86	33.71	5.48	0.45	24.81	316.1	0.095
86	15.69	33.64	5.48	0.45	50	15.81	33.71	5.46	0.44	24.82	315.7	0.158
114	14.30	33.71	5.44	0.51	75	15.75	33.66	5.46	0.44	24.79	318.7	0.237
171	11.16	33.64	3.89	1.46	100	15.55	33.67	5.45	0.47	24.85	314.3	0.316
228	10.06	34.13	1.93	2.17	150	11.80	33.66	4.64	1.02	25.61	242.6	0.455
342	7.85	34.20	1.29	2.68	200	10.57	33.78	2.72	1.89	25.92	213.2	0.570
451	7.10	34.31	0.55	2.99	250	9.68	34.16	1.79	2.30	26.37	171.7	0.666
565	5.93	34.31	0.41	3.15	300	8.64	34.18	1.54	2.52	26.55	154.8	0.747
674	5.22	34.34	0.36	3.16	400	7.39	34.27	0.84	2.87	26.81	131.1	0.890
897	4.50	34.36	0.45	3.26	500	6.50	34.31	0.46	3.07	26.97	117.1	1.014
1114	3.80	34.53	0.70	3.24	600	5.65	34.32	0.39	3.16	27.08	106.9	1.126
1327	3.24	34.57	0.95	3.19	700	5.10	34.34	0.37	3.17	27.16	99.4	1.229
					800	4.76	34.35	0.40	3.21	27.21	95.4	1.327
					1000	4.14	34.48	0.55	3.25	27.38	80.2	1.502

110.100 HORIZON; February 9, 1950; 2358 GCT; 27°36.5'N, 120°15'W; sounding, 2,300 fm; wind, 340°, force 3; weather, partly cloudy; sea, very rough; wire angle, 28°.

0	16.19	33.80	5.48	0.46	0	16.19	33.80	5.48	0.46	24.80	315.6	0.000
9	16.16	33.76	5.48	0.46	10	16.16	33.76	5.48	0.46	24.78	318.3	0.032
22	16.09	33.76	5.48	0.47	20	16.10	33.76	5.48	0.47	24.79	317.5	0.063
48	16.08	33.35	5.48	0.43	30	16.08	33.74	5.48	0.47	24.78	318.8	0.095
69	16.07	33.78	5.45	0.45	50	16.07	33.35	5.47	0.43	24.48	347.6	0.162
95	14.47	33.64	5.51	0.51	75	16.06	33.77	5.46	0.46	24.81	317.4	0.245
142	11.92	33.69	3.99	1.34	100	13.90	33.64	5.50	0.54	25.18	282.7	0.320
189	10.35	33.78	3.39	1.73	150	11.65	33.70	3.86	1.44	25.67	237.0	0.450
284	8.37	34.11	2.34	2.26	200	10.05	33.83	3.26	1.82	26.05	201.0	0.560
382	7.27	34.20	1.14	2.82	250	8.98	34.05	2.71	2.09	26.40	168.7	0.652
477	6.76	34.31	0.59	3.04	300	8.10	34.13	2.12	2.34	26.60	150.3	0.731
572	5.98	-	0.38	3.11	400	7.16	34.22	1.00	2.89	26.81	131.6	0.872
759	4.97	34.33	0.48	3.25	500	6.60	(34.32)	0.50	3.06	(26.96)	(117.9)	(0.997)
952	4.25	34.33	0.66	3.26	600	5.77	(34.32)	0.40	3.14	(27.07)	(108.3)	(1.110)
1147	3.66	34.54	0.75	3.24	700	5.21	(34.33)	0.44	3.23	(27.14)	(101.5)	(1.215)
					800	4.79	34.33	0.52	3.26	27.19	97.3	(1.315)
					1000	4.09	34.36	0.70	3.26	27.29	88.3	(1.500)

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

HORIZON; February 10, 1950; 0627 GCT; 27°16.5'N, 120°54.5'W; sounding, 2,200 fm; wind, 340°, force 3; weather, partly cloudy; sea, rough; wire angle, 28°. 110.110

0	16.60	33.94	5.37	0.42	0	16.60	33.94	5.37	0.42	24.82	314.4	0.000
9	16.82	33.81	5.43	0.38	10	16.82	33.81	5.43	0.38	24.67	329.2	0.032
22	16.81	33.93	5.39	0.44	20	16.81	33.93	5.39	0.43	24.76	320.4	0.065
48	16.77	33.93	5.39	0.44	30	16.80	33.93	5.39	0.44	24.76	320.5	0.097
69	16.70	33.78	5.40	0.42	50	16.76	33.93	5.39	0.44	24.77	320.3	0.161
95	16.38	33.86	5.41	0.44	75	16.65	33.78	5.41	0.42	24.68	329.4	0.242
141	14.80	33.98	5.02	0.60	100	16.32	33.87	5.41	0.45	24.83	316.5	0.323
188	10.87	33.69	4.32	1.32	150	14.25	33.97	4.88	0.66	25.36	266.7	0.468
280	8.42	34.05	2.73	2.16	200	10.35	33.72	4.13	1.50	25.91	214.0	0.589
377	6.98	34.11	1.48	2.78	250	9.00	33.97	3.24	1.97	26.33	174.7	0.686
469	6.49	34.21	0.74	3.01	300	8.05	34.07	2.43	2.30	26.56	153.9	0.768
562	5.88	34.31	0.40	3.16	400	6.86	34.13	1.24	2.85	26.77	134.2	0.912
747	5.00	34.40	0.38	3.24	500	6.28	34.25	0.60	3.07	26.95	118.8	1.034
942	4.26	34.49	0.54	3.26	600	5.66	34.33	0.38	3.18	27.09	106.4	1.146
1138	3.70	34.52	0.78	3.23	700	5.20	34.38	0.37	3.22	27.18	97.6	1.248
					800	4.80	34.42	0.41	3.25	27.26	90.8	1.342
					1000	4.06	34.50	0.61	3.26	27.41	77.7	1.511

HORIZON; February 7, 1950; 2247, 2305 GCT; 28°45'N, 115°46.5'W; sounding, 670 fm; wind, 330°, force 4; weather, fog; sea, moderate; wire angle, 34°, 34°. 115.40

0	14.84	32.39r	5.45	0.46	0	14.84	(33.10)	5.45	0.46	(24.56)	(338.5)	(0.000)
9	14.88	33.10	5.53	0.44	10	14.88	33.11	5.54	0.44	24.56	338.9	0.036
21	14.78	33.12	5.57	0.43	20	14.79	33.12	5.57	0.43	24.59	336.5	0.070
45	14.76	33.62	5.46	-	30	14.77	33.19	5.51	0.43	24.65	331.1	0.104
64	14.64	33.62	5.45	0.44	50	14.73	33.62	4.46	0.44	24.99	299.6	0.167
					75	14.54	33.61	4.44	0.47	25.02	297.2	0.241
89	13.97	33.54	5.34	0.55	100	12.84	33.44	4.02	0.85	25.24	276.8	0.313
133	10.06	33.17	3.92	1.38	150	9.58	33.28	3.59	1.50	25.70	233.1	0.441
176	9.12	33.53	3.17	1.66	200	8.88	33.68	2.83	1.80	26.12	193.5	0.547
263	8.36	33.95	1.92	2.10	250	8.48	33.92	2.14	2.04	26.38	170.6	0.638
355	7.31	33.42r	1.06	2.42	300	7.97	34.02	1.49	2.24	26.53	156.4	0.719
447	6.42	34.18	0.82	2.63	400	6.75	34.13	0.95	2.53	26.79	132.7	0.864
540	6.45	33.97r	0.36	2.79	500	6.45	(34.23)	0.53	2.73	(26.91)	(122.6)	(0.992)
731	5.24	-	0.43	2.90	600	6.13	(34.32)	0.40	2.84	(27.02)	(113.1)	(1.110)
933	4.32	34.49	0.45	2.88	700	5.43	(34.39)	0.42	2.89	(27.16)	(100.0)	(1.216)
					800	4.84	(34.45)	0.45	2.90	(27.28)	(89.1)	(1.311)
					1000	(4.17)	(34.50)			(27.39)	(79.1)	(1.479)

HORIZON; February 6, 1950; 1833 GCT; 28°03'N, 114°54'W; sounding, 45 fm; wind, 360°, force 2; weather, partly cloudy; sea, moderate; wire angle, 3°. 120.35

0	15.09	33.68	5.55	0.42	0	15.09	33.68	5.55	0.42	24.96	301.2
10	15.02	33.68	5.54	0.42	10	15.02	33.68	5.54	0.42	24.97	299.9
25	14.99	33.69	5.55	0.41	20	14.99	33.69	5.55	0.42	24.99	298.8
50	14.26	33.63	5.09	0.66	30	14.98	33.68	5.53	0.43	24.98	299.8
					50	14.26	33.63	5.09	0.66	25.10	289.2

SIO

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

120.45 HORIZON; February 6, 1950; 1239 GCT; 27°43'N, 115°33'W; sounding, 1,600 fm; wind, 340°, force 3; weather, partly cloudy; sea, moderate; wire angle, 28°.

0	14.63	33.64	5.57	0.42	0	14.63	33.64	5.57	0.42	25.02	294.9	0.000
9	14.66	33.64	5.61	0.46	10	14.66	33.64	5.60	0.48	25.02	295.6	0.029
22	14.03	33.62	5.36	0.57	20	14.15	33.62	5.41	0.56	25.11	287.2	0.059
49	12.73	33.64	4.21	1.04	30	13.60	33.62	5.06	0.71	25.22	276.5	0.087
70	11.39	33.77	3.14	1.49	50	12.60	33.64	4.10	1.10	25.44	256.5	0.140
95	10.88	33.91	2.53	1.79	75	11.24	33.79	3.03	1.55	25.81	221.7	0.200
141	10.58	34.23	1.48	2.14	100	10.84	33.94	2.40	1.83	26.00	204.1	0.253
186	10.11	34.42	0.70	2.38	150	10.50	34.29	1.23	2.21	26.33	173.7	0.348
278	9.36	34.49	0.44	2.56	200	9.99	34.44	0.63	2.42	26.54	154.9	0.430
377	8.12	34.43	0.45	2.70	250	9.60	34.48	0.45	2.52	26.63	146.7	0.505
471	7.12	34.43	0.37	2.84	300	9.15	34.49	0.45	2.60	26.72	139.7	0.576
567	6.41	34.43	0.30	2.91	400	7.83	34.43	0.43	2.74	26.87	125.8	0.709
756	5.13	34.43	0.40	3.01	500	6.90	34.43	0.36	2.86	27.00	114.0	0.829
952	4.35	34.49	0.50	2.96	600	6.18	34.43	0.30	2.94	27.10	105.6	0.939
1149	3.74	34.54	0.72	2.98	700	5.48	34.43	0.35	2.99	27.19	97.7	1.040
					800	4.92	34.44	0.41	3.01	27.26	90.8	1.134
					1000	4.19	34.50	0.57	2.96	27.39	79.4	1.306

120.50 HORIZON; February 6, 1950; 0835 GCT; 27°33'N, 115°52.5'W; sounding, 2,400 fm; wind, 360°, force 3; weather, partly cloudy; sea, rough; wire angle, 34°.

0	14.83	33.66	5.63	0.47	0	14.83	33.66	5.63	0.47	25.00	296.9	0.000
9	14.86	33.66	5.55	0.49	10	14.86	33.66	5.55	0.49	24.99	298.4	0.030
21	14.85	33.68	5.55	0.48	20	14.85	33.68	5.55	0.48	25.00	297.0	0.060
45	14.48	33.68	5.53	0.49	30	14.76	33.68	5.55	0.48	25.03	295.2	0.089
64	14.12	33.66	5.44	0.55	50	14.39	33.68	5.51	0.48	25.11	298.1	0.148
88	12.42	33.60	4.51	1.00	75	13.66	33.62	5.10	0.62	25.21	278.9	0.221
129	10.23	33.77	3.35	1.62	100	11.58	33.62	4.12	1.30	25.62	240.5	0.286
172	9.63	34.05	2.52	1.95	150	9.90	33.92	2.93	1.80	26.15	190.9	0.394
255	8.90	34.34	1.10	2.42	200	9.38	34.20	1.95	2.13	26.45	163.0	0.482
343	8.08	-	-	-	250	8.95	34.33	1.15	2.40	26.62	147.5	0.560
428	7.40	34.40	0.44	2.96	300	8.46	34.36	0.84	2.61	26.72	138.6	0.631
512	6.52	34.42	0.31	2.98	400	7.66	34.39	0.51	2.92	26.87	126.1	0.763
686	5.50	34.45	0.28	3.08	500	6.63	34.42	0.33	2.98	27.03	111.0	0.882
869	4.59	34.47	0.43	3.08	600	5.95	34.44	0.25	3.04	27.14	101.8	0.988
1060	3.90	34.54	0.65	3.08	700	5.42	34.45	0.29	3.08	27.21	95.3	1.087
					800	4.92	34.46	0.36	3.08	27.28	89.4	1.179
					1000	4.07	34.51	0.57	3.08	27.41	77.1	1.345

120.60 HORIZON; February 6, 1950; 0222 GCT; 27°13'N, 116°31.5'W; sounding, 2,100 fm; wind, 360°, force 3; weather, partly cloudy; sea, moderate; wire angle, 21°.

0	16.03	33.75	5.19	0.45	0	16.03	33.75	5.19	0.45	24.79	316.6	0.000
9	16.06	33.78	5.33	0.44	10	16.06	33.78	5.33	0.44	24.82	314.9	0.032
23	15.97	33.77	5.33	0.44	20	16.00	33.77	5.33	0.44	24.82	314.6	0.063
51	15.67	33.77	5.35	0.43	30	15.90	33.77	5.34	0.43	24.85	312.6	0.094
74	13.30	33.57	4.68	-	50	15.67	33.77	5.35	0.43	24.90	308.0	0.157
101	11.84	33.60	3.85	1.29	75	13.27	33.57	4.65	0.80	25.25	274.9	0.229
149	9.90	33.95	2.56	1.92	100	11.90	33.60	3.87	1.28	25.54	247.6	0.295
197	9.01	34.14	2.07	2.13	150	9.90	33.95	2.54	1.91	26.17	188.6	0.404
292	7.57	34.20	1.34	2.49	200	8.99	34.14	2.05	1.14	26.47	161.1	0.491
394	7.46	34.37	0.43	2.79	250	8.00	34.18	1.66	2.33	26.65	144.2	0.567
492	6.51	34.37	0.30	2.89	300	7.56	34.21	1.27	2.52	26.74	136.4	0.638
593	5.88	34.43	0.24	2.95	400	7.43	34.37	0.41	2.80	26.88	124.4	0.768
795	4.78	34.47	0.36	3.04	500	6.47	34.38	0.30	2.90	27.02	111.7	0.886
					600	5.85	34.44	0.24	2.96	27.15	100.5	0.992
					700	5.20	34.46	0.30	3.01	27.24	91.8	1.088
					800	(4.75)	(34.47)	(0.37)	(3.04)	(27.31)	(86.4)	(1.177)

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

HORIZON; February 5, 1950; 2009 GCT; 26°52.5'N, 117°10'W; sounding, 2,300 fm; wind, 360°, force 3; weather, partly cloudy; sea, moderate; wire angle, 12°. 120.70

0	16.09	33.78	5.38	0.42	0	16.09	33.78	5.38	0.42	24.81	315.1	0.000
10	16.03	33.78	5.41	0.44	10	16.03	33.78	5.41	0.44	24.83	313.7	0.031
24	15.75	33.77	5.41	0.46	20	15.81	33.77	5.40	0.45	24.86	310.4	0.063
53	15.23	33.71	5.48	0.45	30	15.65	33.76	5.43	0.46	24.89	307.8	0.094
78	12.89	33.55	4.60	0.98	50	15.25	33.72	5.47	0.45	24.95	303.0	0.155
107	11.06	33.75	3.15	1.66	75	14.05	33.55	4.80	0.90	25.07	291.7	0.229
160	9.47	33.96	2.67	1.95	100	11.49	33.70	3.36	1.56	25.70	233.0	0.295
213	9.46	34.33	1.23	2.44	150	9.50	33.91	2.79	1.89	26.21	185.1	0.399
319	8.28	34.38	0.60	2.72	200	9.46	34.31	1.55	2.33	26.52	155.9	0.484
429	7.14	34.36	0.31	2.94	250	9.25	34.35	0.87	2.58	26.59	150.6	0.560
535	6.38	34.43	0.18	3.04	300	8.53	34.38	0.65	2.68	26.73	138.3	0.633
641	5.80	34.42	0.18	3.09	400	7.41	34.36	0.38	2.89	26.88	124.7	0.765
848	4.58	34.48	0.37	3.11	500	6.60	34.40	0.20	3.01	27.02	112.0	0.883
1056	3.92	34.58	0.56	3.08	600	6.01	34.42	0.18	3.08	27.12	104.1	0.991
1259	3.34	34.58	0.84	3.12	700	5.44	34.42	0.20	3.10	27.18	97.9	1.092
					800	4.80	34.46	0.28	3.11	27.29	87.9	1.185
					1000	4.08	34.55	0.50	3.08	27.44	74.3	1.347

HORIZON; February 5, 1950; 1356 GCT; 26°32.5'N, 117°48.5'W; sounding, 2,000 fm; wind, 010°, force 3; weather, partly cloudy; sea, moderate; wire angle, 24°. 120.80

0	16.20	33.77	5.35		0	16.20	33.77	5.35		24.78	318.1	0.000
9	16.24	33.78	5.30		10	16.24	33.78	5.30		24.77	318.8	0.032
23	15.81	33.73	5.40		20	15.95	33.73	5.38		24.80	316.3	0.064
50	15.77	33.73	5.39		30	15.80	33.73	5.40		24.84	313.5	0.095
73	15.64	33.73	5.42		50	15.77	33.73	5.39		24.84	313.2	0.158
100	12.52	33.53	4.64		75	15.63	33.73	5.41		24.88	310.9	0.236
147	10.19	33.77	3.50		100	12.52	33.53	4.64		25.37	264.3	0.308
196	9.32	34.05	2.45		150	10.13	33.79	3.44		26.01	204.3	0.425
288	8.83	34.34	0.87		200	9.30	34.07	2.39		26.36	171.1	0.519
386	7.53	34.31	0.59		250	9.09	34.30	1.44		26.58	151.7	0.599
481	6.66	34.34	0.35		300	8.70	34.34	0.82		26.67	143.8	0.673
576	5.97	34.38	0.31		400	7.39	34.31	0.54		26.84	128.1	0.809
760	4.85	34.42	0.43		500	6.53	34.35	0.33		26.99	114.6	0.931
945	4.20	34.46	0.58		600	5.82	34.39	0.32		27.12	103.8	1.040
1133	3.70	34.47	0.74		700	5.19	34.41	0.38		27.21	95.2	1.139
					800	4.68	34.43	0.46		27.28	88.6	1.231
					1000	4.05	34.47	0.63		27.38	80.0	1.400

HORIZON; February 5, 1950; 0743 GCT; 26°13'N, 118°27.5'W; sounding, 2,400 fm; wind, 340°, force 3; weather, partly cloudy; sea, moderate; wire angle, 22°. 120.90

0	17.41	34.00	5.27	0.40	0	17.41	34.00	5.27	0.40	24.67	328.3	0.000
10	17.42	33.84	5.25	-	10	17.42	33.84	5.25	0.40	24.54	340.7	0.033
24	17.40	34.02	5.27	0.40	20	17.41	33.95	5.26	0.40	24.63	332.7	0.067
47	17.02	33.87	5.30	0.40	30	17.37	34.00	5.29	0.40	24.68	328.4	0.100
69	17.03	33.82	5.32	0.42	50	17.02	33.86	5.30	0.40	24.66	331.5	0.166
91	14.24	33.58	5.46	0.46	75	17.03	33.80	5.35	0.43	24.61	336.6	0.250
139	12.32	33.96	2.69	1.79	100	13.78	33.58	5.34	0.51	25.16	284.7	0.327
182	9.78	34.09	2.39	2.06	150	11.71	34.00	2.58	1.87	25.89	215.9	0.452
264	9.10	34.36	1.24	2.53	200	9.55	34.13	2.19	2.18	26.37	170.6	0.549
348	8.38	34.47	0.53	2.81	250	9.19	34.32	1.42	2.47	26.58	151.8	0.630
427	7.43	34.40	0.43	2.93	300	8.81	34.43	0.79	2.67	26.72	138.9	0.703
509	6.73	34.45	0.31	3.04	400	7.71	34.43	0.46	2.89	26.89	123.9	0.833
668	5.52	34.42	0.26	3.17	500	6.80	34.45	0.34	3.03	27.04	111.1	0.951
832	4.62	34.45	0.40	3.13	600	6.01	34.43	0.27	3.13	27.12	103.3	1.059
1021	4.04	34.52	0.56	3.25	700	5.34	34.42	0.28	3.17	27.20	96.6	1.158
					800	4.80	34.44	0.37	3.14	27.28	89.3	1.252
					1000	4.07	34.51	0.53	3.24	27.41	77.3	1.418

SIO

CCOFI 5002

OBSERVED					INTERPOLATED					COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m

120.100 HORIZON; February 5, 1950; 0130 GCT; 25°53'N, 119°06'W; sounding, 2,500 fm; wind, 330°, force 3; weather, partly cloudy; sea, moderate; wire angle, 19°.

0	17.78	33.95	5.25	0.38	0	17.78	33.95	5.25	0.38	24.54	340.6	0.000
9	17.83	33.91	5.27	0.40	10	17.83	33.91	5.26	0.40	24.50	344.7	0.034
23	17.80	33.96	5.24	0.40	20	17.80	33.95	5.24	0.40	24.54	341.5	0.069
46	17.80	34.02	5.09	0.40	30	17.80	33.98	5.17	0.40	24.56	339.6	0.100
69	17.80	33.98	5.22	0.40	50	17.80	34.02	5.10	0.40	24.59	337.3	0.170
91	16.10	33.73	5.40	0.41	75	17.80	33.96	5.27	0.40	24.55	342.5	0.255
141	11.93	33.48	4.40	1.06	100	14.99	33.61	5.36	0.44	24.92	307.0	0.336
187	10.88	34.05	2.03	2.04	150	11.18	33.48	4.04	1.29	25.58	245.1	0.474
278	8.62	34.22	1.73	2.32	200	10.57	34.10	1.93	2.08	26.17	189.7	0.584
374	8.02	34.31	0.61	2.70	250	9.10	34.18	1.79	2.22	26.48	160.7	0.671
466	7.14	34.47	0.34	2.91	300	8.44	34.24	1.52	2.41	26.63	147.2	0.748
562	6.40	34.38	0.33	2.98	400	7.80	34.35	0.47	2.78	26.82	131.1	0.887
752	5.10	34.49	0.36	3.01	500	6.85	34.45	0.33	2.94	27.03	111.9	1.008
942	4.32	34.51	0.48	3.02	600	6.09	34.40	0.33	3.00	27.09	106.4	1.117
1141	3.74	34.59	0.70	3.03	700	5.40	34.47	0.35	3.02	27.23	93.6	1.217
					800	4.85	34.50	0.39	3.01	27.32	85.6	1.307
					1000	4.11	34.52	0.55	3.02	27.41	77.1	1.469

120.110 HORIZON; February 4, 1950; 1917 GCT; 25°33'N, 119°44'W; sounding, 2,300 fm; wind, 350°, force 2; weather, partly cloudy; sea, moderate; wire angle, 7°.

0	17.86	34.11	5.19	0.42	0	17.86	34.11	5.19	0.42	24.65	330.3	0.000
10	17.95	34.13	5.12	0.44	10	17.95	34.13	5.12	0.44	24.64	331.7	0.033
25	17.87	34.11	5.14	0.44	20	17.91	34.12	5.13	0.44	24.64	331.9	0.066
50	-	34.13	5.15	0.40	30	17.85	34.11	5.15	0.43	24.64	331.7	0.099
74	17.76	34.13	5.18	0.40	50	17.80	34.13	5.15	0.40	24.67	329.6	0.166
99	14.26	33.62	5.28	0.51	75	17.75	34.13	5.20	0.40	24.69	329.1	0.248
153	10.98	33.82	3.05	1.74	100	14.00	33.62	5.29	0.52	25.14	286.1	0.325
203	10.23	34.20	1.81	2.21	150	11.03	33.80	3.16	1.68	25.86	218.7	0.451
300	8.62	34.27	1.29	2.54	200	10.28	34.19	1.84	2.19	26.29	178.2	0.551
403	7.36	34.33	0.58	2.95	250	9.49	34.23	1.53	2.40	26.46	163.3	0.636
501	6.86	34.40	0.31	3.08	300	8.62	34.27	1.29	2.54	26.63	147.5	0.714
604	6.04	34.61r	0.28	3.11	400	7.36	34.33	0.60	2.94	26.86	126.2	0.850
805	4.88	34.45	0.40	3.16	500	6.88	34.40	0.31	3.08	26.98	115.9	0.971
1001	4.16	34.51	0.56	3.14	600	6.06	34.44	0.29	3.10	27.13	103.2	1.080
1205	3.62	34.52	0.73	3.14	700	5.39	34.44	0.33	3.13	27.21	95.6	1.180
					800	4.90	34.45	0.40	3.16	27.27	89.8	1.272
					1000	4.16	34.51	0.55	3.14	27.40	78.2	1.441

123.40 HORIZON; February 1, 1950; 0942 GCT; 27°18'N, 114°51.5'W; sounding, 500 fm; wind, 340°, force 3; weather, partly cloudy; sea, rough; wire angle, 23°.

0	15.59	33.83	5.34	0.45	0	15.59	33.83	5.34	0.45	24.96	300.7	0.000
9	15.64	33.85	5.35	0.53	10	15.64	33.85	5.36	0.54	24.96	300.6	0.030
23	15.62	33.86	5.39	0.55	20	15.64	33.86	5.39	0.54	24.97	300.2	0.060
46	12.82	33.57	4.65	0.90	30	15.60	33.85	5.38	0.58	24.97	300.3	0.090
68	11.36	33.66	3.85	1.36	50	12.67	33.57	4.51	0.98	25.37	262.9	0.146
91	10.46	33.72	3.38	1.55	75	10.74	33.68	3.65	1.43	25.81	221.1	0.207
141	10.28	34.25	1.52	2.21	100	10.41	33.76	3.10	1.63	25.94	210.1	0.261
185	9.96	34.36	1.02	2.41	150	10.25	34.28	1.40	2.27	26.37	170.1	0.356
277	9.36	34.45	0.46	2.58	200	9.84	34.39	0.87	2.43	26.52	156.3	0.437
378	8.10	34.42	0.33	2.76	250	9.56	34.44	0.55	2.53	26.61	149.0	0.514
					300	9.12	34.45	0.39	2.62	26.69	142.1	0.586

HORIZON; February 1, 1950; 1603 GCT; 26°58'N, 115°30.5'W; sounding, 2,250 fm; wind, 300°, force 4; weather, partly cloudy; sea, rough; wire angle, 40°. 123.50

OBSERVED Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	INTERPOLATED Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	COMPUTED σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m
0	16.56	33.87	5.35	0.36	0	16.56	33.87	5.35	0.36	24.77	318.9	0.000
9	16.60	33.87	5.37	0.37	10	16.60	33.87	5.37	0.37	24.76	319.9	0.032
20	16.59	33.87	5.41	0.40	20	16.59	33.87	5.41	0.40	24.77	319.9	0.064
43	16.59	33.87	5.30	0.38	30	16.59	33.87	5.36	0.39	24.77	319.8	0.096
61	16.62	33.87	5.35	0.38	50	16.60	33.87	5.32	0.38	24.76	321.0	0.160
82	14.00	33.58	5.30	0.58	75	15.92	33.60	5.33	0.42	24.71	326.6	0.241
121	11.66	33.58	4.23	1.27	100	12.86	33.58	5.05	0.96	25.34	266.8	0.315
158	9.71	33.80	3.42	1.64	150	9.99	33.74	3.55	1.56	25.99	205.7	0.434
231	8.78	34.14	2.21	2.20	200	8.99	34.01	2.74	1.98	26.37	170.7	0.527
308	8.42	34.35	0.79	2.68	250	8.68	34.20	1.72	2.33	26.56	152.9	0.608
385	7.80	34.42	0.45	2.83	300	8.46	34.34	0.86	2.64	26.71	140.2	0.682
462	7.37	34.44	0.31	3.00	400	7.73	34.43	0.50	2.85	26.89	124.2	0.814
616	6.00	34.43	0.29	3.07	500	7.06	34.44	0.30	3.03	26.99	115.5	0.934
783	4.96	34.46	0.37	3.15	600	6.12	34.43	0.30	3.06	27.11	104.8	1.044
964	4.24	34.51	0.56	3.21	700	5.43	34.45	0.30	3.12	27.21	95.4	1.144
					800	4.86	34.47	0.37	3.16	27.29	87.8	1.236
					1000	(4.14)	(34.51)	(0.60)	(3.21)	(27.40)	(78.1)	(1.401)

HORIZON; February 1, 1950; 2208 GCT; 26°38.5'N, 116°09'W; sounding, 2,200 fm; wind, 360°, force 4; weather, partly cloudy; sea, rough; wire angle, 34°. 123.60

0	17.05	33.96	5.31	0.38	0	17.05	33.96	5.31	0.38	24.73	322.9	0.000
9	17.08	33.96	5.30	0.40	10	17.07	33.96	5.31	0.40	24.72	323.9	0.032
21	17.02	33.96	5.34	0.41	20	17.03	33.96	5.33	0.41	24.73	323.1	0.065
45	17.04	33.96	5.31	0.38	30	17.01	33.96	5.34	0.40	24.74	323.2	0.097
66	17.02	33.96	5.34	0.38	50	17.04	33.96	5.32	0.38	24.73	324.4	0.162
90	13.70	33.64	5.15	0.59	75	16.89	33.89	5.32	0.54	24.71	326.9	0.243
135	12.12	33.84	2.79	1.74	100	13.22	33.66	4.88	0.72	25.33	268.1	0.318
180	10.87	34.13	1.94	2.11	150	11.64	33.92	2.45	1.91	25.84	220.6	0.440
269	9.98	34.45	0.70	2.58	200	10.61	34.24	1.58	2.24	26.27	180.2	0.540
363	8.76	34.47	0.31	2.79	250	10.18	34.42	0.86	2.51	26.49	160.7	0.625
453	7.74	34.43	0.26	3.00	300	9.59	34.46	0.51	2.67	26.62	149.0	0.703
544	6.85	34.44	0.21	3.05	400	8.30	34.45	0.28	2.87	26.82	131.5	0.842
727	5.41	34.44	0.29	3.07	500	7.25	34.43	0.24	3.04	26.96	118.8	0.967
917	4.52	34.49	0.41	3.03	600	6.36	34.44	0.20	3.06	27.09	107.4	1.081
1112	3.86	34.52	0.61	3.11	700	5.60	34.44	0.27	3.07	27.18	98.4	1.184
					800	5.03	34.45	0.40	3.04	27.26	91.5	1.278
					1000	4.21	34.50	0.55	3.07	27.39	79.7	1.451

HORIZON; February 2, 1950; 1650 GCT; 26°43.5'N, 114°29.5'W; sounding, 1,250 fm; wind, 310°, force 2; weather, partly cloudy; sea, moderate; wire angle, 8°. 127.40

0	15.70	33.84	5.35	0.36	0	15.70	33.84	5.35	0.36	24.95	302.2	0.000
10	15.74	33.84	5.39	0.39	10	15.74	33.84	5.39	0.39	24.94	303.4	0.030
25	15.73	33.82	5.38	0.40	20	15.74	33.83	5.38	0.40	24.93	304.5	0.061
55	14.09	33.68	4.92	0.67	30	15.73	33.80	5.35	0.40	24.90	307.0	0.091
80	12.24	33.61	4.15	1.12	50	15.60	33.70	5.06	0.58	24.86	311.7	0.153
109	10.74	33.73	3.23	1.60	75	12.55	33.62	4.30	1.03	25.43	257.6	0.224
163	9.70	34.14	1.90	2.20	100	11.18	33.68	3.51	1.45	25.74	229.2	0.285
218	9.83	34.42	0.84	2.55	150	9.76	34.00	2.21	2.08	26.23	182.8	0.388
326	8.76	34.47	0.43	2.83	200	9.83	34.37	1.00	2.45	26.51	157.6	0.473
439	7.44	34.45	0.24	2.97	250	9.69	34.45	0.71	2.67	26.60	150.3	0.551
546	6.52	34.43	0.26	3.02	300	9.10	34.46	0.52	2.79	26.70	141.0	0.623
654	5.74	34.47	0.25	3.13	400	7.86	34.46	0.27	2.94	26.89	123.9	0.755
864	4.62	34.51	0.39	3.18	500	6.88	34.44	0.26	3.00	27.02	112.9	0.874
1076	3.94	34.54	0.58	3.13	600	6.13	34.45	0.26	3.08	27.12	103.5	0.982
1288	3.45	34.56	0.86	3.12	700	5.41	34.48	0.27	3.13	27.24	93.0	1.080
					800	4.88	34.50	0.33	3.17	27.32	85.8	1.169
					1000	4.16	34.53	0.49	3.14	27.42	76.9	1.332

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
127.50	HORIZON; February 2, 1950; 1037 GCT; 26°23.5'N, 115°08'W; sounding, 1,850 fm; wind, 360°, force 4; weather, partly cloudy; sea, rough; wire angle, 45°.											
0	15.52	33.91	5.39	0.44	0	15.52	33.91	5.39	0.44	25.03	293.8	0.000
8	15.56	33.84	5.42	0.46	10	15.55	33.84	5.42	0.46	24.98	299.3	0.030
18	15.52	33.86	5.42	0.43	20	15.50	33.86	5.42	0.43	25.01	297.0	0.059
34	15.28	33.87	5.32	0.50	30	15.40	33.87	5.35	0.47	25.03	294.7	0.089
56	13.03	33.55	4.69	0.84	50	14.40	33.56	4.87	0.74	25.01	297.2	0.148
75	11.74	33.57	4.19	1.20	75	11.74	33.57	4.19	1.20	25.55	246.6	0.216
109	10.86	33.84	2.80	1.84	100	11.01	33.77	3.17	1.71	25.84	219.7	0.275
142	10.46	34.07	2.08	2.08	150	10.41	34.12	1.94	2.11	26.21	184.6	0.376
205	10.13	34.43	1.10	2.54	200	10.17	34.42	1.19	2.50	26.49	159.5	0.461
271	9.62	34.47	0.36	2.80	250	9.81	34.47	0.46	2.72	26.59	151.0	0.540
335	8.53	34.43	0.39	2.98	300	9.05	34.45	0.38	2.89	26.70	141.1	0.612
402	7.86	34.49	0.25	3.07	400	7.90	34.49	0.25	3.07	26.91	122.4	0.744
537	6.57	34.43	0.21	3.18	500	6.69	34.45	0.20	3.16	27.05	109.4	0.860
684	5.55	34.42	0.23	3.23	600	5.98	34.43	0.20	3.21	27.13	102.8	0.966
858	4.68	34.49	0.37	3.24	700	5.48	34.42	0.22	3.24	27.18	98.3	1.066
					800	4.98	34.47	0.29	3.24	27.28	89.3	1.160
					1000	(4.15)	(34.53)			(27.42)	(76.8)	(1.327)
127.60	HORIZON; February 2, 1950; 0424 GCT; 26°03.5'N, 115°46.5'W; sounding, 2,100 fm; wind, 350°, force 3; weather, partly cloudy; sea, rough; wire angle, 35°.											
0	16.35		5.38	0.34	0	16.35		5.38	0.34			
9	16.40		5.37	0.34	10	16.40		5.36	0.34			
21	16.39		5.27	0.35	20	16.39		5.27	0.35			
45	16.38		5.36	0.36	30	16.37		5.29	0.36			
66	16.48		5.35	0.34	50	16.41		5.36	0.35			
90	14.68		5.49	0.42	75	16.48		5.39	0.37			
135	11.24		4.09	1.22	100	13.45		5.45	0.50			
178	10.44		2.32	1.94	150	10.90		3.13	1.50			
266	8.90		1.15	2.45	200	10.00		1.95	2.07			
359	8.30		0.43	2.87	250	9.09		1.32	2.34			
450	7.36		0.30	2.91	300	8.64		0.81	2.68			
542	6.57		0.28	3.01	400	7.88		0.34	2.89			
729	5.39		0.29	3.12	500	6.91		0.29	2.97			
922	4.42		0.49	3.16	600	6.16		0.27	3.05			
1118	3.76		0.69	3.13	700	5.55		0.28	3.10			
					800	5.02		0.35	3.14			
					1000	4.10		0.57	3.15			
130.35	HORIZON; February 2, 1950; 2239 GCT; 26°19'N, 113°48.5'W; sounding, 67 fm; wind, 320°, force 2; weather, partly cloudy; sea, moderate; wire angle, 5°.											
0	16.25	33.82	5.45	0.45	0	16.25	33.82	5.45	0.45	24.80	315.6	0.000
10	15.90	33.78	5.44	0.45	10	15.90	33.78	5.44	0.45	24.85	311.3	0.031
25	15.85	33.77	5.44	0.46	20	15.86	33.78	5.44	0.45	24.86	310.6	0.062
50	13.85	33.59	4.83	0.82	30	15.85	33.76	5.40	0.48	24.85	312.3	0.094
75	12.71	33.78	3.51	1.48	50	13.85	33.59	4.83	0.82	25.15	284.1	0.153
					75	12.71	33.78	3.51	1.48	25.53	248.6	0.220

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	µg at/L	m	°C	‰	ml/L	µg at/L	g/L	$10^5 cm^3/g$	dyn. m

HORIZON; February 3, 1950; 0152 GCT; 26°09'N, 114°07.5'W; sounding, 1,170 fm; wind, 320°, force 3; weather, partly cloudy; sea, rough; wire angle, 25°. 130.40

0	16.44	33.81	5.33	0.41	0	16.44	33.81	5.33	0.41	24.75	320.5	0.000
9	16.33	33.84	5.36	0.44	10	16.33	33.84	5.36	0.44	24.80	316.5	0.032
22	16.28	33.80	5.42	0.44	20	16.28	33.80	5.42	0.44	24.78	318.2	0.064
49	-	33.84	5.31	0.46	30	16.28	33.80	5.41	0.44	24.78	318.5	0.095
70	12.87	33.44	4.93	0.72	50	16.25	33.84	5.30	0.46	24.82	315.7	0.159
97	11.21	33.62	3.62	1.47	75	12.15	33.44	4.77	0.86	25.37	263.5	0.231
145	10.62	34.18	1.77	2.22	100	11.16	33.62	3.47	1.55	25.69	233.4	0.293
193	10.20	34.33	1.16	2.44	150	10.56	34.21	1.65	2.25	26.26	180.6	0.397
290	9.25	34.69r	0.36	2.81	200	10.14	(34.35)	1.08	2.47	(26.44)	(164.2)	(0.483)
393	8.14	34.45	0.30	2.96	250	9.66	(34.44)	0.60	2.69	(26.59)	(150.6)	(0.537)
493	7.04	34.42	0.22	3.07	300	9.15	(34.45)	0.34	2.83	(26.68)	(142.5)	(0.610)
592	6.40	34.42	0.20	3.10	400	8.06	34.45	0.29	2.97	26.85	127.7	(0.745)
788	5.24	34.44	0.26	3.16	500	6.97	34.42	0.20	3.06	26.99	115.7	(0.867)
987	4.28	34.43	0.48	3.16	600	6.35	34.42	0.20	3.10	27.07	108.5	(0.979)
1186	3.69	34.51	0.69	3.17	700	5.75	34.43	0.20	3.14	27.16	101.2	(1.084)
					800	5.17	34.44	0.28	3.16	27.23	93.9	(1.181)
					1000	4.23	34.43	0.50	3.16	27.33	85.1	(1.360)

HORIZON; February 3, 1950; 0805 GCT; 25°49'N, 114°48.5'W; sounding, 3,100 fm; wind, 310°, force 3; weather, partly cloudy; sea, moderate; wire angle, 7°. 130.50

0	16.51	33.86	5.32	0.41	0	16.51	33.86	5.32	0.41	24.78	318.2	0.000
10	16.37	33.84	5.35	0.42	10	16.37	33.84	5.35	0.42	24.79	316.9	0.032
25	15.99	33.78	5.45	0.49	20	16.10	33.80	5.43	0.47	24.82	314.5	0.063
55	-	33.57	5.17	0.70	30	(15.97)	33.74	5.44	0.51	(24.81)	(316.4)	(0.095)
79	12.43	33.53	4.65	1.02	50	(14.93)	33.58	5.23	0.65	(24.91)	(306.7)	(0.157)
109	10.52	33.69	3.58	1.66	75	(12.68)	33.53	4.79	0.94	(25.34)	(266.6)	(0.229)
163	9.62	34.07	2.29	2.27	100	10.94	33.62	3.85	1.45	25.73	229.6	(0.291)
217	9.43	34.31	1.45	2.55	150	9.68	33.98	2.56	2.16	26.23	182.7	(0.394)
324	8.72	34.43	0.58	3.04	200	9.51	34.26	1.68	2.48	26.48	159.5	(0.479)
436	7.59	34.47	0.25	3.21	250	9.26	34.37	1.12	2.70	26.60	149.4	(0.557)
513p	6.77	34.45	0.23	3.21	300	8.90	34.40	0.73	2.95	26.69	142.4	(0.630)
751p	5.10	34.47	0.31	3.29	400	8.02	34.47	0.31	3.20	26.88	124.8	(0.763)
962p	4.27	34.52	0.46	3.28	500	6.88	34.45	0.24	3.22	27.02	112.2	(0.882)
1199p	3.56	34.57	0.78	3.29	600	6.04	34.45	0.25	3.23	27.14	102.3	(0.989)
					700	5.37	34.46	0.28	3.28	27.23	93.9	(1.087)
					800	4.85	34.48	0.35	3.30	27.30	87.0	(1.177)
					1000	4.15	34.53	0.51	3.28	27.42	76.8	(1.341)

HORIZON; February 3, 1950; 1418 GCT; 25°29'N, 115°24'W; sounding, 2,300 fm; wind, 310°, force 2; weather, partly cloudy; sea, moderate; wire angle, 32°. 130.60

0	15.10	33.71	5.43	0.40	0	15.10	33.71	5.43	0.40	24.98	299.2	0.000
9	15.14	33.71	5.51	0.41	10	15.14	33.71	5.51	0.41	24.97	300.4	0.030
22	15.11	33.71	5.56	0.42	20	15.11	33.71	5.55	0.42	24.97	300.0	0.060
46	-	33.68	5.51	0.42	30	15.09	33.70	5.55	0.42	24.97	300.5	0.090
67	14.54	33.64	5.43	0.45	50	14.93	33.68	5.49	0.42	24.99	299.2	0.150
91	13.28	33.57	4.92	0.76	75	14.16	33.62	5.34	0.50	25.11	288.8	0.224
134	10.44	33.71	3.78	1.52	100	12.75	33.58	4.70	0.89	25.36	264.9	0.392
175	10.58	34.22	1.60	2.25	150	10.49	33.88	3.10	1.85	26.01	203.7	0.410
253	9.76	34.36	0.85	2.65	200	10.49	34.29	1.14	2.41	26.33	174.5	0.504
331	8.50	34.34	0.77	2.82	250	9.80	34.36	0.86	2.64	26.51	158.8	0.587
406	7.88	34.40	0.42	2.91a)	300	8.87	34.35	0.82	2.76	26.65	145.8	0.664
481	7.00	34.38	0.31	3.00	400	7.95	34.40	0.44	2.90	26.83	129.7	0.802
627	5.92	34.40	0.24	3.14	500	6.81	34.38	0.29	3.02	26.98	116.5	0.925
783	5.01	34.45	0.32	3.19	600	6.08	34.40	0.24	3.12	27.09	106.4	1.037
937	4.30	34.49	0.48	3.15	700	5.49	34.42	0.25	3.17	27.18	98.4	1.139
					800	4.91	34.45	0.34	3.19	27.27	90.0	1.233
					1000	(4.14)	(34.51)			(27.40)	(78.1)	(1.401)

a) Mean value of 3.02 and 2.80 µg at/L.

130.70 HORIZON; February 3, 1950; 2031 GCT; 25°08.5'N, 116°02'W; sounding, 2,350 fm; wind, 320°, force 2; weather, partly cloudy; sea, moderate; wire angle, 16°.

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
0	16.70	33.78	5.36	0.38	0	16.70	33.78	5.36	0.38	24.79	316.7	0.000
10	16.35	33.78	5.39	0.44	10	16.35	33.78	5.39	0.44	24.75	321.2	0.032
24	16.30	33.78	5.38	0.44	20	16.31	33.78	5.38	0.44	24.76	320.5	0.064
48	-	33.80	5.38	0.42	30	16.27	33.78	5.38	0.43	24.77	319.8	0.096
72	16.02	33.80	5.40	0.43	50	16.15	33.80	5.38	0.42	24.81	316.4	0.160
95	13.78	33.57	4.92	0.62	75	15.99	33.80	5.37	0.44	24.85	313.8	0.238
146	10.78	33.68	3.34	1.61	100	13.05	33.58	4.75	0.70	25.30	270.6	0.311
191	10.36	33.82	1.85	2.26	150	10.72	33.69	3.24	1.68	25.83	221.5	0.435
280	9.54	34.43	0.65	2.76	200	10.30	33.86	1.64	2.32	26.03	202.8	0.541
376	8.34	34.42	0.39	3.00	250	9.85	34.27	0.89	2.63	26.43	166.4	0.633
469	7.28	34.42	0.25	3.12	300	9.33	34.43	0.55	2.83	26.64	147.1	0.712
567	6.36	34.45	0.23	3.17	400	8.05	34.42	0.35	3.04	26.83	129.7	0.849
760	5.16	34.43	0.33	3.25	500	6.95	34.42	0.23	3.14	26.99	115.4	0.972
951	4.32	34.52	0.45	3.26	600	6.10	34.45	0.24	3.18	27.13	103.0	1.081
1151	3.70	34.56	0.70	3.32	700	5.49	34.43	0.28	3.24	27.19	97.6	1.181
					800	4.94	34.44	0.35	3.25	27.26	91.1	1.276
					1000	4.15	34.54	0.50	3.28	27.43	76.1	1.444

130.80 HORIZON; February 4, 1950; 0244 GCT; 24°48.5'N, 116°40'W; sounding, 2,350 fm; wind, 340°, force 2; weather, partly cloudy; sea, moderate; wire angle, 0°.

0	17.14	33.87	5.28	0.42	0	17.14	33.87	5.28	0.42	24.55	340.0	0.000
10	16.92	33.86	5.28	0.42	10	16.92	33.86	5.28	0.42	24.68	327.5	0.033
25	16.87	33.84	5.26	0.43	20	16.88	33.84	5.26	0.43	24.67	328.6	0.066
50	-	33.85	5.39	0.42	30	16.87	33.84	5.26	0.43	24.67	328.9	0.099
75	16.87	33.86	5.32	0.42	50	16.87	33.85	5.39	0.42	24.68	328.5	0.165
100	14.00	33.66	4.90	0.75	75	16.87	33.86	5.32	0.42	24.69	328.2	0.247
155	12.49	34.31	1.47	2.21	100	14.00	33.66	4.90	0.75	25.17	283.3	0.323
205	11.58	34.55	0.70	2.54	150	12.58	34.26	1.59	2.15	25.92	218.3	0.448
304	9.68	34.48	0.41	2.78	200	11.68	34.54	0.75	2.60	26.31	177.0	0.545
407	7.88	34.40	0.43	2.91	250	10.69	34.52	0.49	2.68	26.48	162.1	0.630
506	6.83	34.34	0.31	3.04	300	9.74	34.48	0.42	2.77	26.61	150.1	0.708
609	6.07	34.42	0.27	3.10	400	7.97	34.40	0.44	2.90	26.83	130.0	0.848
812	4.89	34.45	0.36	3.13	500	6.90	34.34	0.32	3.03	26.93	120.7	0.973
1010	4.16	34.49	0.53	3.12	600	6.11	34.41	0.27	3.10	27.09	106.0	1.086
1212	3.68	34.52	0.71	3.18	700	5.45	34.44	0.28	3.12	27.20	96.5	1.188
					800	4.93	34.45	0.35	3.13	27.27	90.2	1.281
					1000	4.18	34.49	0.51	3.12	27.38	80.0	1.452

40.50 BLACK DOUGLAS; March 13, 1950; 1837 GCT; 41°23'N, 125°23'W; sounding, 1,690 fm; wind, 190°, force 3; weather, continuous moderate rain; sea, rough; wire angle, 10°.

0	9.48	32.70			0	9.48	32.70			25.26	271.8	0.000
10	9.53	32.74			10	9.53	32.74			25.28	270.1	0.027
25	9.50	32.75			20	9.51	32.75			25.30	268.8	0.054
49	9.47	32.74			30	9.50	32.76			25.31	268.2	0.081
73	9.16	32.92			50	9.47	32.81			25.35	264.3	0.134
97	8.20	33.31			75	9.00	32.95			25.54	247.3	0.198
150	7.92	33.89			100	8.17	33.40			26.02	202.0	0.254
198	7.53	33.98			150	7.92	33.89			26.44	162.8	0.345
292	6.46	34.09			200	7.50	33.90			26.51	156.8	0.426
391	5.80	34.14			250	6.87	34.05			26.71	138.1	0.499
486	5.31	34.22			300	6.40	34.10			26.81	128.9	0.565
586	4.84	34.25			400	5.76	34.15			26.93	118.4	0.689
782	4.24	34.34			500	5.24	34.22			27.05	107.6	0.802
974	3.78	34.47			600	4.79	34.25			27.13	101.3	0.907
1174	3.26	34.47			700	4.46	34.29			27.20	95.2	1.006
					800	4.20	34.35			27.27	88.6	1.097
					1000	3.70	34.47			27.42	75.8	1.262

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

BLACK DOUGLAS; March 13, 1950; 1227 GCT; 41°03'N, 126°09'W; sounding, 1,680 fm; wind, 200°, force 3; weather, overcast; sea, slight; wire angle, 16°. 40.60

0	10.07	32.79	0	10.07	32.79	25.24	274.1	0.000
10	10.00	32.77	10	10.00	32.77	25.23	275.0	0.027
25	9.77	32.72	20	9.85	32.74	25.23	274.9	0.055
48	9.39	32.66	30	9.60	32.70	25.25	274.2	0.082
72	9.56	32.88	50	9.39	32.66	25.25	274.2	0.137
96	8.21	33.09	75	9.55	32.91	25.42	258.7	0.204
148	7.86	33.78	100	8.15	33.15	25.82	220.3	0.264
194	7.32	33.93	150	7.85	33.80	26.38	168.7	0.361
286	6.42	34.02	200	7.25	33.94	26.57	150.5	0.440
382	5.72	34.07	250	6.76	33.99	26.68	141.1	0.514
474	5.22	34.16	300	6.31	34.02	26.76	133.6	0.582
571	4.88	34.22	400	5.60	34.09	26.90	120.8	0.709
761	4.33	34.33	500	5.12	34.18	27.03	109.4	0.824
951	3.68	34.40	600	4.82	34.24	27.12	102.4	0.930
1152	3.20	34.49	700	4.54	34.30	27.20	95.4	1.029
			800	4.20	34.35	27.27	88.6	1.122
			1000	3.55	34.42	27.39	77.8	1.288

BLACK DOUGLAS; March 13, 1950; 0644 GCT; 40°42'N, 126°55'W; sounding, 1,680 fm; wind, 180°, force 2; weather, overcast; sea, moderate; wire angle, 21°. 40.70

0	10.59	32.84	0	10.59	32.84	25.19	278.9	0.000
10	10.61	32.86	10	10.61	32.86	25.20	278.0	0.028
24	10.39	32.86	20	10.43	32.86	25.23	275.4	0.055
47	10.37	32.84	30	10.32	32.86	25.25	273.9	0.083
70	10.37	32.84	50	10.37	32.84	25.23	276.3	0.138
92	9.53	33.22	75	10.33	32.85	25.24	275.6	0.207
142	8.70	33.68	100	9.32	33.32	25.77	225.4	0.270
186	7.89	33.91	150	8.55	33.74	26.22	183.2	0.372
273	6.69	34.05	200	7.65	33.95	26.52	155.4	0.456
363	5.94	34.13	250	6.95	34.02	26.68	141.3	0.531
449	5.36	34.14	300	6.44	34.08	26.79	130.8	0.598
540	4.90a)	34.17	400	5.67	34.14	26.94	118.0	0.723
721	4.39	34.33	500	5.08	34.15	27.01	111.2	0.837
902	3.87	34.54r	600	4.72	34.22	27.11	102.7	0.944
1093	3.35	34.49	700	4.45	34.31	27.21	93.6	1.042
			800	4.17	34.40	27.31	84.6	1.131
			1000	3.57	34.49	27.45	72.8	1.289

BLACK DOUGLAS; March 13, 1950; 0115 GCT; 40°23'N, 127°40'W; sounding, 900 fm; wind, 060°, force 1; weather, cloudy; sea, moderate; wire angle, 3°. 40.80

0	10.05	32.77	0	10.05	32.77	25.22	275.6	0.000
10	10.03	32.77	10	10.03	32.77	25.23	275.5	0.028
25	9.96	32.74	20	9.97	32.75	25.22	276.2	0.055
50	9.96	32.74	30	9.96	32.74	25.22	276.8	0.083
74	9.37	32.94	50	9.96	32.74	25.22	277.1	0.138
98	8.31	33.55	75	9.30	32.96	25.49	251.9	0.204
151	7.53	33.91	100	8.25	33.56	26.13	191.4	0.260
199	7.04	34.00	150	7.55	33.90	26.50	156.8	0.347
295	6.20	34.02	200	7.03	34.00	26.65	143.2	0.422
395	5.47	34.09	250	6.58	34.01	26.72	137.2	0.492
491	4.98	34.18	300	6.15	34.02	26.78	131.5	0.558
591	4.62	34.25	400	5.43	34.09	26.93	118.7	0.684
786	4.01	34.38	500	4.93	34.19	27.06	106.4	0.796
953	3.46	34.47	600	4.59	34.26	27.16	97.9	0.899
1162	3.01	34.49	700	4.28	34.32	27.24	90.8	0.993
			800	3.96	34.39	27.33	83.0	1.080
			1000	3.32	34.48	27.46	70.8	1.234

a) Mean value of 4.86 and 4.93°C.

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

40.90 BLACK DOUGLAS; March 12, 1950; 1922 GCT; 40°02'N, 128°25'W; sounding, 2,460 fm; wind, 090°, force 1; weather, partly cloudy; sea, slight; wire angle, 0°.

0	9.66	32.65	0	9.66	32.65	25.20	277.8	0.000
10	9.54	32.68	10	9.54	32.68	25.24	274.1	0.028
25	9.41	32.68	20	9.45	32.68	25.26	272.9	0.055
50	9.41	32.65	30	9.41	32.67	25.25	273.9	0.082
75	8.52	32.70	50	9.41	32.65	25.23	275.7	0.137
100	7.95u	33.24	75	8.52	32.70	25.42	258.6	0.204
155	7.84	33.73	100	8.24	33.24	25.88	214.8	0.263
204	7.16	33.95	150	7.89	33.70	26.29	176.6	0.361
302	6.40	34.02	200	7.23	33.93	26.57	151.0	0.443
405	5.51	34.13	250	6.79	33.99	26.67	141.4	0.516
502	4.96	34.16	300	6.41	34.02	26.75	135.0	0.585
603	4.67	34.25	400	5.55	34.12	26.93	118.0	0.711
800	4.01	34.34	500	4.96	34.16	27.04	108.8	0.825
995	3.44	34.42	600	4.68	34.24	27.13	100.6	0.929
1198	3.03	34.51	700	4.36	34.30	27.21	93.3	1.026
			800	4.01	34.34	27.29	86.4	1.117
			1000	3.44	34.43	27.41	75.7	1.279

40.100 BLACK DOUGLAS; March 12, 1950; 1304 GCT; 39°42'N, 129°10'W; sounding, 2,500 fm; wind, 090°, force 2; weather, clear; sea, slight; wire angle, 0°.

0	10.58	32.75	0	10.58	32.75	25.12	285.7	0.000
10	10.58	32.72	10	10.58	32.72	25.10	288.1	0.029
25	10.54	32.74	20	10.56	32.73	25.11	287.2	0.057
50	10.56	32.73	30	10.54	32.74	25.12	286.2	0.086
75	10.48	32.74	50	10.56	32.73	25.11	287.6	0.143
100	10.18	32.72	75	10.48	32.74	25.13	286.2	0.215
174	7.79	33.21	100	10.16	32.72	25.17	282.8	0.286
279	7.08	33.95	150	8.13	33.00	25.71	232.1	0.415
383	6.05	34.04	200	7.58	33.48	26.16	189.5	0.521
483	5.40	34.13	250	7.29	33.80	26.46	162.2	0.608
588	4.82	34.22	300	6.91	33.98	26.65	144.5	0.686
792	4.18	34.31	400	5.91	34.05	26.84	127.6	0.821
992	3.54	34.47	500	5.30	34.14	26.98	114.5	0.942
1196	3.12	34.45	600	4.77	34.23	27.11	102.4	1.051
			700	4.45	34.28	27.19	95.8	1.149
			800	4.15	34.32	27.25	90.3	1.243
			1000	3.52	34.47	27.43	73.8	1.407

40.110 BLACK DOUGLAS; March 12, 1950; 0717 GCT; 39°23'N, 129°55'W; sounding, 2,460 fm; wind, 090°, force 1; weather, partly cloudy; sea, slight; wire angle, 4°.

0	11.60	32.80	0	11.60	32.80	24.98	299.2	0.000
10	11.64	32.79	10	11.64	32.79	24.94	304.7	0.030
25	11.55	32.78	20	11.59	32.78	24.96	300.9	0.060
49	11.56	32.79	30	11.55	32.79	24.98	299.6	0.091
73	11.52	32.77	50	11.56	32.79	24.98	300.2	0.150
98	10.57	32.84	75	11.50	32.77	24.97	301.2	0.226
152	8.53	33.13	100	10.40	32.85	25.23	277.1	0.298
201	7.61	33.74	150	8.57	33.11	25.73	230.2	0.425
299	6.80	33.95	200	7.65	33.72	26.34	172.5	0.526
402	5.85	34.00	250	7.20	33.90	26.55	153.6	0.607
499	5.32	34.11	300	6.80	33.95	26.64	145.3	0.682
602	4.76	34.16	400	5.86	34.00	26.80	130.5	0.819
802	4.13	34.34	500	5.32	34.11	26.95	117.2	0.943
997	3.56	34.43	600	4.79	34.16	27.06	107.9	1.056
1199	3.08	34.44	700	4.40	34.23	27.16	99.0	1.159
			800	4.14	34.33	27.26	89.4	1.254
			1000	4.05	34.43	27.35	82.8	1.426

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

BLACK DOUGLAS; March 14, 1950; 0633 GCT; 40°48'N, 124°57'W; sounding, 1,510 fm; wind, 320°, force 2; weather, overcast; sea, rough; wire angle, 21°. 43.50

0	9.28r	32.83	0	(9.99)	32.83	(25.28)	(270.2)	(0.000)	
10	9.99	32.80	10	9.99	32.80	25.26	272.5	0.027	
23	9.83	32.80	20	9.85	32.80	25.28	270.6	0.054	
47	9.80	32.81	30	9.82	32.80	25.29	270.3	0.081	
70	9.40	33.01	50	9.80	32.83	25.31	268.0	0.135	
94	8.21	33.40	75	9.13	33.09	25.63	238.8	0.198	
145	8.03	33.78	100	8.18	33.46	26.06	197.7	0.253	
191	7.57	33.96	150	7.98	33.82	26.37	168.9	0.345	
280	6.60	34.05	200	7.36	33.97	26.58	149.7	0.425	
371	5.88	34.13	250	6.85	34.02	26.69	140.1	0.497	
457	5.63a)	34.21	300	6.42	34.07	26.78	131.4	0.564	
548	5.16	34.24	400	5.75	34.16	26.94	117.5	0.689	
732	4.41	34.38	500	5.47	34.22	27.03	110.6	0.803	
917	3.79	34.44	600	4.90	34.27	27.13	101.1	0.909	
1113	3.28	34.49	700	4.50	34.35	27.24	91.2	1.006	
			800	4.16	34.41	27.32	83.8	1.093	
			1000	3.54	34.46	27.43	74.7	1.251	

BLACK DOUGLAS; March 14, 1950; 1338 GCT; 40°28'N, 125°45'W; sounding, 1,540 fm; wind, 320°, force 2; weather, overcast; sea, rough; wire angle, 14°. 43.60

0	10.16	32.78	0	10.16	32.78	25.22	276.4	0.000	
10	10.18	32.78	10	10.18	32.78	25.21	277.2	0.028	
24	10.17	32.79	20	10.17	32.78	25.21	277.1	0.055	
48	10.09	32.81	30	10.16	32.79	25.22	276.5	0.083	
73	9.39	32.88	50	10.06	32.81	25.25	273.7	0.138	
97	8.69	33.49	75	9.25	32.89	25.45	255.4	0.204	
150	8.30	33.81	100	8.65	33.50	26.02	201.7	0.261	
196	7.66	34.00	150	8.30	33.81	26.32	174.3	0.355	
288	6.69	34.06	200	7.60	34.01	26.58	150.2	0.436	
382	6.14	34.13	250	7.04	34.04	26.68	141.1	0.509	
469	5.65	34.20	300	6.61	34.07	26.76	134.0	0.578	
562	5.22	34.23	400	6.04	34.14	26.89	122.5	0.706	
665p	4.70	34.25	500	5.52	34.21	27.01	112.1	0.823	
			600	5.02	34.24	27.09	104.8	0.932	

BLACK DOUGLAS; March 14, 1950; 0033 GCT; 40°04'N, 124°55'W; sounding, 680 fm; wind, 340°, force 3; weather, cloudy; sea, moderate; wire angle, 20°. 47.55

0	9.92	32.51	0	9.92	32.51	25.05	292.6	0.000	
10	9.96	32.57	10	9.96	32.57	25.09	289.0	0.029	
23	10.04	32.92	20	10.02	32.80	25.25	273.2	0.057	
51	9.67	33.06	30	10.06	32.98	25.39	260.8	0.084	
74	9.12	33.35	50	9.75	33.06	25.50	250.1	0.135	
101	8.70	33.57	75	9.10	33.38	25.86	216.7	0.193	
151	7.77	33.87	100	8.72	33.56	26.06	198.3	0.245	
199	7.25	34.02	150	7.78	33.87	26.44	162.5	0.335	
294	6.44	34.09	200	7.25	34.02	26.64	144.6	0.413	
393	5.82	34.20	250	6.79	34.07	26.74	135.5	0.482	
490	5.50	34.20	300	6.39	34.09	26.81	129.3	0.549	
588	5.02	34.25	400	5.79	34.20	26.97	124.8	0.675	
786	4.46	34.38	500	5.45	34.20	27.01	111.9	0.794	
1018	3.90	34.45	600	4.97	34.26	27.11	103.0	0.902	
			700	4.70	34.33	27.20	95.1	1.001	
			800	4.43	34.39	27.28	88.4	1.092	
			1000	3.93	34.45	27.38	80.2	1.261	

a) Alternate value, 5.29°C, not used in interpolation.

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

47.60 BLACK DOUGLAS; March 14, 1950; 2017 GCT; 39°54'N, 125°18'W; sounding, 1,419 fm; wind, 340°, force 3; weather, overcast; sea, moderate; wire angle, 18°.

0	9.82	32.72	0	9.82	32.72	25.23	275.5	0.000
10	9.79	32.70	10	9.79	32.70	25.21	276.8	0.028
24	9.74	32.71	20	9.75	32.70	25.22	276.3	0.055
52	9.65	32.89	30	9.72	32.73	25.25	274.0	0.083
76	9.21	33.21	50	9.69	32.85	25.35	264.8	0.137
105	8.78	33.58	75	9.25	33.21	25.70	231.8	0.199
157	7.94	33.87	100	8.85	33.53	26.01	202.5	0.253
210	7.31	34.02	150	8.05	33.85	26.38	167.9	0.346
314	6.40	34.11	200	7.40	34.00	26.60	148.0	0.425
424	5.63	34.16	250	6.94	34.07	26.72	137.4	0.496
529	5.03	34.16	300	6.52	34.11	26.81	129.6	0.562
635	4.72	34.22	400	5.79	34.15	26.93	118.6	0.686
843	4.03	34.40	500	5.16	34.16	27.01	111.2	0.801
1052	3.54	34.47	600	4.80	34.19	27.08	105.9	0.911
1251	3.12	32.74	700	4.55	34.28	27.18	97.0	1.012
			800	4.21	34.36	27.28	88.2	1.105
			1000	3.65	34.46	27.41	76.1	1.269

50.55 BLACK DOUGLAS; March 9, 1950; 0120 GCT; 39°30'N, 124°30'W; sounding, 1,140 fm; wind, 310°, force 4; weather, cloudy; sea, very rough; wire angle, 7°.

0	11.17	32.79	0	11.17	32.79	25.05	292.2	0.000
10	11.16	32.79	10	11.16	32.79	25.05	292.5	0.029
25	11.16	32.79	20	11.15	32.79	25.05	292.6	0.058
55	10.67	32.83	30	11.14	32.79	25.05	292.7	0.088
80	8.85	32.81	50	10.84	32.83	25.14	285.0	0.146
109	8.47	33.25	75	8.95	32.81	25.43	257.0	0.213
163	7.96	33.78	100	8.57	33.07	25.70	232.2	0.274
217	7.50	33.95	150	8.08	33.71	26.27	178.5	0.377
324	6.42	34.07	200	7.67	33.91	26.49	158.7	0.461
436	5.63	34.09	250	7.14	34.00	26.64	145.2	0.538
542	5.18	34.21	300	6.64	34.06	26.75	135.0	0.607
648	4.58	34.28	400	5.84	34.08	26.87	124.5	0.737
855	4.03	34.38	500	5.39	34.16	26.99	114.0	0.856
1063	3.64	34.45	600	4.81	34.25	27.12	101.6	0.964
1263	3.14	34.52	700	4.39	34.31	27.22	92.8	1.061
			800	4.13	34.36	27.29	87.1	1.151
			1000	3.75	34.43	27.38	79.2	1.318

50.60 BLACK DOUGLAS; March 9, 1950; 0524 GCT; 39°20'N, 124°52'W; sounding, 1,610 fm; wind, 270°, force 2; weather, partly cloudy; sea, rough; wire angle, 3°.

0	11.33	32.81	0	11.33	32.81	25.03	294.0	0.000
10	11.34	32.81	10	11.34	32.81	25.04	293.5	0.029
25	11.12	32.79	20	11.15	32.79	25.05	292.6	0.059
50	11.08	32.79	30	11.10	32.79	25.06	292.0	0.088
75	10.19	32.88	50	11.08	32.79	25.06	292.1	0.146
100	-	33.16	75	10.19	32.88	25.29	271.0	0.217
155	7.96a)	33.68	100	9.04	33.16	25.69	232.7	0.280
204	7.63	33.87	150	8.00	33.65	26.24	181.9	0.383
302	6.54	34.02	200	7.67	33.86	26.45	162.4	0.469
404	5.64	34.07	250	7.15	33.96	26.60	148.5	0.547
500	5.21	34.14	300	6.55	34.02	26.73	136.7	0.618
599	4.67	34.20	400	5.66	34.06	26.87	123.8	0.749
794	4.29	34.36	500	5.21	34.14	26.99	113.2	0.867
986	3.61	34.43	600	4.67	34.20	27.10	103.5	0.975
1213	3.18	34.51	700	4.48	34.28	27.19	96.2	1.075
			800	4.26	34.36	27.27	88.7	1.168
			1000	3.57	34.43	27.40	77.3	1.333

a) Alternate value, 8.43°C, not used in interpolation.

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

50.70

BLACK DOUGLAS; March 9, 1950; 1329 GCT; 39°00'N, 125°36.5'W; sounding, 2,080 fm; wind, 240°, force 5; weather, overcast; sea, very rough; wire angle, 31°.

0	11.51	32.90	0	11.51	32.90	25.07	290.0	0.000
9	11.50	32.90	10	11.50	32.90	25.07	290.2	0.029
21	11.48	32.92	20	11.49	32.92	25.09	288.7	0.058
47	11.49	32.90	30	11.49	32.91	25.08	289.8	0.087
67	10.65	32.95	50	11.49	32.90	25.07	290.9	0.145
92	-	33.21	75	10.00	33.05	25.45	255.4	0.213
136	8.39	33.60	100	9.03	33.30	25.80	222.4	0.273
180	7.86	33.84	150	8.22	33.69	26.23	182.1	0.374
263	6.94	34.02	200	7.64	33.92	26.50	157.4	0.459
348	6.02	34.02	250	7.07	34.01	26.65	143.8	0.534
430	5.42	34.11	300	6.52	34.02	26.73	136.4	0.604
514	5.06	34.16	400	5.57	34.07	26.89	121.9	0.733
685	4.51	34.31	500	5.11	34.15	27.01	111.4	0.850
865	3.89	34.36	600	4.77	34.23	27.12	102.5	0.957
1060	3.46	34.45	700	4.45	34.32	27.22	92.9	1.054
			800	4.00	34.35	27.28	87.5	1.145
			1000	3.55	34.43	27.40	77.1	1.310

50.80

BLACK DOUGLAS; March 9, 1950; 2347 GCT; 38°40'N, 126°21'W; sounding, 2,360 fm; wind, 320°, force 4; weather, cloudy; sea, very rough; wire angle, 2°.

0	10.93	32.75	0	10.93	32.75	25.06	291.6	0.000
10	10.94	32.94r	10	10.94	32.75	25.06	291.5	0.029
25	10.91	32.75	20	10.92	32.75	25.06	291.5	0.058
55	10.70	32.75	30	10.89	32.75	25.07	291.3	0.087
80	9.19	32.85	50	10.75	32.75	25.09	289.4	0.146
110	-	33.15	75	9.40	32.80	25.36	264.4	0.215
164	7.52	33.75	100	8.50	33.04	25.68	233.6	0.277
218	7.13	33.96	150	7.65	33.65	26.29	177.0	0.380
326	6.08	34.09	200	7.26	33.92	26.56	152.2	0.462
439	5.42	34.14	250	6.82	34.01	26.68	140.6	0.535
545	4.81	34.23	300	6.32	34.07	26.80	130.1	0.603
860	3.88	34.49	400	5.62	34.13	26.93	118.1	0.727
1070	3.38	34.51	500	5.02	34.19	27.05	107.3	0.839
			600	(4.66)	(34.29)	(27.18)	(96.7)	(0.941)
			700	(4.36)	(34.38)	(27.28)	(87.3)	(1.033)
			800	(4.05)	(34.46)	(27.37)	(78.8)	(1.117)
			1000	3.55	34.51	27.46	71.1	(1.267)

50.90

BLACK DOUGLAS; March 10, 1950; 0730 GCT; 38°20'N, 127°05'W; sounding, 2,470 fm; wind, 320°, force 4; weather, overcast; sea, very rough; wire angle, 30°.

0	10.43	32.68	0	10.43	32.68	25.09	288.4	0.000
9	10.44	32.66	10	10.44	32.66	25.07	290.2	0.029
22	10.42	32.66	20	10.42	32.66	25.08	290.2	0.058
47	10.33	32.69	30	10.40	32.67	25.08	289.7	0.087
68	9.43	32.68	50	10.28	32.69	25.12	286.1	0.145
93	-	32.68	75	9.08	32.68	25.32	268.4	0.214
138	7.78	33.06	100	8.25	32.69	25.45	255.9	0.279
182	7.64	33.68	150	7.74	33.42	26.09	195.3	0.392
269	6.76	33.91	200	7.56	33.75	26.38	169.0	0.482
358	5.99	34.02	250	7.01	33.88	26.56	152.7	0.563
441	5.42	34.07	300	6.45	33.96	26.70	139.7	0.635
524	5.04	34.16	400	5.69	34.04	26.86	125.4	0.768
688	4.48	34.32	500	5.15	34.13	26.99	113.4	0.887
867	3.88	34.42	600	4.78	34.24	27.12	101.9	0.995
1049	3.40	34.47	700	4.44	34.33	27.23	92.1	1.092
			800	4.11	34.39	27.31	84.6	1.180
			1000	3.51	34.46	27.43	74.5	1.339

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

50.100 BLACK DOUGLAS; March 10, 1950; 1525 GCT; 38°00'N, 127°49'W; sounding, 2,500 fm; wind, 320°, force 3; weather, cloudy; sea, very rough; wire angle, 9°.

0	11.73	32.83	0	11.73	32.83	24.97	299.4	0.000
10	11.73	32.95	10	11.73	32.95	25.07	290.5	0.029
25	11.69	32.81	20	11.70	32.83	24.98	299.1	0.059
49	11.60	32.79	30	11.67	32.80	24.96	301.1	0.089
74	9.71	32.88	50	11.60	32.79	24.97	301.1	0.149
98	-	32.96	75	9.65	32.88	25.38	262.5	0.220
156p	8.05	33.74	100	8.93	32.97	25.56	245.1	0.283
254p	6.97	33.98	150	8.12	33.70	26.26	179.8	0.389
354p	6.10	34.04	200	7.52	33.87	26.48	159.4	0.474
463p	5.28	34.09	250	7.01	33.97	26.63	146.1	0.551
688p	4.47	34.13	300	6.55	34.02	26.73	136.7	0.621
873p	3.90	34.34	400	5.72	34.07	26.88	123.8	0.751
1104p	3.36	-	500	5.10	34.10	26.97	115.0	0.871
			600	4.72	34.12	27.03	110.2	0.983
			700	4.43	34.14	27.08	105.0	1.091
			800	4.12	34.24	27.19	96.0	1.191
			1000	3.60	(34.43)	(27.40)	(77.6)	(1.365)

50.110 BLACK DOUGLAS; March 10, 1950; 2142 GCT; 37°40'N, 128°33'W; sounding, 2,600 fm; wind, 310°, force 3; weather, cloudy; sea, rough; wire angle, 8°.

0	11.21	32.74	0	11.21	32.74	25.00	296.8	0.000
10	11.18	32.72	10	11.18	32.72	24.99	298.0	0.030
25	11.08	32.73	20	11.10	32.73	25.01	296.2	0.059
49	11.07	32.73	30	11.08	32.73	25.02	296.1	0.089
73	9.68	32.65	50	11.07	32.73	25.02	296.4	0.148
98	9.28	32.86	75	9.65	32.65	25.20	279.4	0.220
151	8.10	33.56	100	9.25	32.89	25.45	255.9	0.287
199	7.79	33.90	150	8.13	33.53	26.12	192.8	0.400
294	6.48	34.02	200	7.76	33.90	26.47	160.7	0.488
394	5.73	34.09	250	7.18	33.98	26.61	147.3	0.564
490	5.13	34.16	300	6.41	34.02	26.75	135.0	0.635
591	4.87	34.23	400	5.68	34.09	26.89	121.9	0.764
790	4.16	34.36	500	5.09	34.17	27.03	109.5	0.879
985	3.59	34.43	600	4.85	34.24	27.11	102.8	0.986
1187	3.16	34.49	700	4.50	34.31	27.21	94.2	1.084
			800	4.14	35.36	27.28	87.4	1.175
			1000	3.55	34.43	27.40	77.1	1.339

50.120 BLACK DOUGLAS; March 11, 1950; 0457 GCT; 37°20'N, 129°16.5'W; sounding, 2,600 fm; wind, 280°, force 3; weather, partly cloudy; sea, rough; wire angle, 26°.

0	11.57	32.75	0	11.57	32.75	24.94	302.4	0.000
10	11.57	32.76	10	11.57	32.76	24.95	301.6	0.030
23	11.53	32.75	20	11.54	32.75	24.95	302.3	0.060
50	11.48	32.74	30	11.50	32.75	24.96	301.8	0.091
73	10.64	32.70	50	11.48	32.74	24.95	302.5	0.151
99	9.14	32.78	75	10.45	32.70	25.10	288.5	0.225
146p	8.03	33.53	100	9.07	32.78	25.39	261.3	0.294
255p	7.09	34.00	150	7.96	33.57	26.18	187.2	0.406
341p	6.12	34.02	200	7.48	33.90	26.51	156.6	0.492
426p	5.42	34.07	250	7.14	34.00	26.63	145.4	0.567
619p	4.54	34.23	300	6.60	34.01	26.72	138.2	0.638
757p	4.08	34.33	400	5.60	34.05	26.87	123.6	0.769
949p	3.67	34.23r	500	5.04	34.13	27.00	112.1	0.887
			600	4.62	34.21	27.11	102.3	0.994
			700	4.25	34.29	27.22	92.9	1.092
			800	4.00	(34.35)	(27.29)	(86.4)	(1.181)
			1000	(3.55)				

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

BLACK DOUGLAS; March 11, 1950; 1222 GCT; 37°00'N, 130°00'W; sounding, 2,700 fm; wind, 320°, force 4; weather, partly cloudy; sea, rough; wire angle, 15°. 50.130

0	13.71	33.13	0	13.71	33.13	24.83	313.6	0.000
10	13.72	33.13	10	13.72	33.13	24.82	314.2	0.031
24	13.69	33.13	20	13.69	33.13	24.83	313.9	0.063
53	13.85	33.17	30	13.70	33.14	24.83	313.6	0.094
77	13.99	33.22	50	13.81	33.16	24.83	314.7	0.157
106	11.27	32.83	75	13.98	33.22	24.84	314.4	0.236
159	8.85	33.19	100	12.07	32.84	24.92	306.8	0.313
212	7.99	33.70	150	9.08	33.10	25.64	238.6	0.450
316	6.77	33.95	200	8.15	33.64	26.21	185.6	0.556
424	5.55	34.01	250	7.52	33.81	26.43	164.7	0.643
527	4.91	34.10	300	6.96	33.92	26.60	149.7	0.721
630	4.54	34.20	400	5.77	34.00	26.81	129.5	0.861
835	3.93	34.36	500	5.02	34.07	26.96	116.3	0.984
1044	3.45	34.45	600	4.65	34.17	27.08	105.5	1.095
1247	3.08	34.50	700	4.31	34.27	27.20	95.1	1.195
			800	4.03	34.34	27.28	87.4	1.286
			1000	3.55	34.44	27.41	76.3	1.451

BLACK DOUGLAS; March 8, 1950; 1257 GCT; 38°28.5'N, 124°14'W; sounding, 1,930 fm; wind, 240°, force 2; weather, continuous light rain; sea, very rough; wire angle, 10°. 55.60

0	11.15	32.78	0	11.15	32.78	25.05	292.8	0.000
10	11.18	32.84	10	11.18	32.84	25.08	289.2	0.029
25	11.10	32.84	20	11.11	32.84	25.10	288.2	0.058
50	10.24	32.83	30	11.08	32.84	25.10	287.7	0.087
74	9.93	32.92	50	10.24	32.83	25.24	275.1	0.143
98	9.39	33.08	75	9.89	32.93	25.38	262.4	0.210
152	9.48	33.80	100	9.39	33.09	25.58	243.2	0.273
201	8.46	34.02	150	9.47	33.78	26.11	194.4	0.383
297	7.38	34.08	200	8.49	34.02	26.45	162.4	0.472
382	6.31	34.13	250	7.90	34.06	26.47	151.6	0.551
492	5.58	34.13	300	7.34	34.08	26.67	142.9	0.624
592	5.16	34.27	400	6.16	34.14	26.88	124.1	0.758
791	4.39	34.40	500	5.55	34.17	26.97	115.4	0.877
985	3.91	34.45	600	5.12	34.28	27.11	103.0	0.987
1186	3.38	34.50	700	4.71	34.36	27.22	93.1	1.085
			800	4.37	34.40	27.29	87.0	1.175
			1000	3.87	34.45	27.39	79.1	1.341

BLACK DOUGLAS; March 7, 1950; 1957 GCT; 37°37'N, 123°37'W; sounding, 1,760 fm; wind, calm; weather, cloudy; sea, slight; wire angle, 3°. 60.60

0	10.37	33.04	0	10.37	33.04	25.38	260.4	0.000
10	10.15	33.03	10	10.15	33.03	25.41	258.1	0.026
25	10.06	33.05	20	10.07	33.04	25.43	256.3	0.052
50	9.85	33.12	30	10.00	33.06	25.46	253.9	0.077
75	9.80	33.48	50	9.85	33.12	25.53	247.3	0.127
100	9.71	33.71	75	9.80	33.48	25.82	220.2	0.186
155	8.98	33.92	100	9.71	33.71	26.01	202.7	0.239
204	8.24	34.05	150	9.07	33.91	26.28	178.3	0.334
302	7.18	34.14	200	8.28	34.04	26.50	157.8	0.418
404	6.21	34.22	250	7.73	34.10	26.63	146.3	0.494
501	5.58	34.25	300	7.20	34.14	26.74	136.6	0.564
602	5.12	34.33	400	6.24	34.22	26.93	119.2	0.692
800	4.33	34.40	500	5.58	34.25	27.03	109.9	0.807
994	3.80	34.46	600	5.12	34.33	27.15	99.2	0.912
1196	3.30	34.52	700	4.72	34.37	27.23	92.5	1.008
			800	4.33	34.40	27.30	86.5	1.097
			1000	3.79	34.46	27.40	77.7	1.261

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

60.70 BLACK DOUGLAS; March 7, 1950; 1317 GCT; 37°17'N, 124°21'W; sounding, 2,220 fm; wind, 020°, force 2; weather, cloudy; sea, moderate; wire angle, 12°.

0	11.53	33.14	0	11.53	33.14	25.25	273.2	0.000
10	11.55	33.13	10	11.55	33.13	25.24	274.2	0.027
25	11.50	33.13	20	11.54	33.13	25.24	274.2	0.055
49	10.20	33.31	30	11.40	33.14	25.28	271.2	0.082
73	-	33.58	50	10.10	33.33	25.65	235.8	0.133
96	8.49	33.71	75	8.88	33.60	26.06	197.2	0.187
149	8.26	34.00	100	8.45	33.73	26.23	181.7	0.234
196	7.72	34.05	150	8.25	34.00	26.47	159.5	0.319
290	6.76	34.09	200	7.68	34.05	26.60	148.3	0.397
389	6.05	34.17	250	7.13	34.07	26.69	140.1	0.468
484	5.47	34.22	300	6.66	34.10	26.78	132.2	0.537
582	4.98	34.30	400	5.97	34.18	26.94	118.1	0.662
776	4.41	34.42	500	5.38	34.23	27.04	108.9	0.776
970	3.85	34.47	600	4.90	34.32	27.17	97.4	0.879
1171	3.34	34.52	700	4.59	34.39	27.26	89.3	0.972
			800	4.35	34.43	27.32	84.5	1.059
			1000	3.75	34.48	27.42	75.7	1.219

60.80 BLACK DOUGLAS; March 7, 1950; 0622 GCT; 36°57'N, 125°04'W; sounding, 2,400 fm; wind, 040°, force 2; weather, clear; sea, rough; wire angle, 12°.

0	11.96	33.01	0	11.96	33.01	25.08	289.8	0.000
10	12.00	33.03	10	12.00	33.03	25.08	289.4	0.029
25	11.97	32.99	20	11.98	32.99	25.05	292.2	0.058
49	10.97	33.06	30	11.95	32.99	25.06	291.9	0.087
73	-	33.25	50	10.95	33.07	25.30	269.0	0.143
98	9.31	33.47	75	9.94	33.27	25.63	238.1	0.207
150	8.10	33.83	100	9.25	33.50	25.93	210.7	0.263
197	7.74	34.00	150	8.10	33.83	26.36	169.9	0.358
287	6.68	34.04	200	7.70	34.00	26.56	152.2	0.438
381	5.99	34.11	250	7.05	34.02	26.66	142.8	0.512
470	5.49	34.18	300	6.56	34.05	26.75	134.7	0.581
565	4.98	34.27	400	5.89	34.12	26.89	122.1	0.710
755	4.36	34.41	500	5.32	34.21	27.03	109.6	0.826
945	3.76	34.45	600	4.84	34.30	27.16	98.2	0.929
1143	3.36	34.52	700	4.55	34.38	27.26	89.7	1.023
			800	4.21	34.43	27.33	83.1	1.111
			1000	3.62	34.47	27.43	75.0	1.268

60.90 BLACK DOUGLAS; March 6, 1950; 2223 GCT; 36°37'N, 125°47'W; sounding, 2,480 fm; wind, 040°, force 4; weather, partly cloudy; sea, rough; wire angle, 9°.

0	12.32	32.97	5.78	0	12.32	32.97	5.78	24.97	299.4	0.000
10	12.22	32.99	5.75	10	12.22	32.99	5.75	25.01	296.1	0.030
25	11.94	33.00	5.79	20	11.98	32.99	5.80	25.05	292.2	0.059
50	10.14	33.22	5.58	30	11.92	33.01	5.77	25.08	289.8	0.088
75	9.70	33.42	5.42	50	10.14	33.22	5.58	25.56	244.7	0.142
99	8.73	33.60	5.15	75	9.70	33.42	5.42	25.79	223.1	0.200
153	8.02	33.92	4.12	100	8.71	33.61	5.12	26.10	194.5	0.252
202	7.55	34.00	2.91	150	8.04	33.91	4.17	26.44	163.0	0.342
300	6.63	34.07	1.98	200	7.56	34.00	2.94	26.58	150.4	0.421
400	5.75	34.14	1.04	250	7.10	34.03	2.36	26.66	142.6	0.493
494	5.34	34.21	0.63	300	6.63	34.07	1.98	26.76	134.4	0.562
594	4.80	34.29	0.34	400	5.75	34.14	1.04	26.93	119.0	0.689
679p	4.62	34.34	0.48r	500	5.29	34.21	0.62	27.04	109.1	0.803
				600	4.79	34.29	(0.34)	27.16	98.2	0.907
				700	(4.57)	(34.35)		(27.23)	(92.0)	(1.002)

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

60.100

BLACK DOUGLAS; March 6, 1950; 1359 GCT; 36°17'N, 126°30'W; sounding, 2,540 fm; wind, 050°, force 2; weather, clear; sea, very rough; wire angle, 13°.

0	11.96	32.92	5.58	0	11.96	32.92	5.58	25.01	296.4	0.000
10	12.02	32.92	5.62	10	12.02	32.92	5.62	25.00	297.5	0.030
25	11.89	32.88	5.62	20	11.92	32.89	5.62	24.99	298.4	0.059
49	10.24	32.93	5.51	30	11.88	32.88	5.60	24.99	298.7	0.089
73	9.41	33.06	5.01	50	10.15	32.93	5.49	25.33	266.2	0.146
98	8.76	33.35	4.31	75	9.37	33.08	4.94	25.58	243.3	0.210
151	7.98	33.77	3.07	100	8.70	33.36	4.25	25.90	212.9	0.267
199	7.64	33.98	2.27	150	7.99	33.77	3.08	26.33	172.8	0.363
294	6.68	34.09	1.47	200	7.63	33.98	2.26	26.55	152.9	0.444
392	6.07	34.17	0.81	250	7.14	34.05	1.80	26.67	141.6	0.518
487	5.22	34.42	0.55	300	6.64	34.10	1.41	26.78	132.0	0.586
587	4.83	34.31	0.42	400	6.00	34.18	0.78	26.93	119.1	0.712
784	4.20	34.38	0.36	500	5.14	34.26	0.53	26.09	103.8	0.823
977	3.68	34.49	0.52	600	4.76	34.32	0.41	27.19	95.7	0.923
1177	3.24	34.52	0.85	700	4.47	34.34	0.36	27.24	91.6	1.016
				800	4.15	34.39	0.38	27.31	85.1	1.105
				1000	3.64	34.50	0.55	27.45	72.9	1.263

60.110

BLACK DOUGLAS; March 6, 1950; 0732 GCT; 35°57'N, 127°12'W; sounding, 2,620 fm; wind, 320°, force 3; weather, clear; sea, very rough; wire angle, 10°.

0	13.00	32.86	5.62	0	13.00	32.86	5.62	24.76	320.1	0.000
10	13.06	32.86	5.72	10	13.06	32.86	5.72	24.74	321.5	0.032
25	13.02	32.84	5.66	20	13.05	32.84	5.70	24.73	323.0	0.064
54	12.61	32.83	5.99	30	12.99	32.84	5.67	24.74	322.1	0.097
79	11.04	32.74	5.89	50	12.75	32.83	5.97	24.78	318.7	0.161
108	9.48	32.94	5.48	75	11.45	32.74	5.90	24.96	302.6	0.238
161	8.61	33.57	4.65	100	9.68	32.88	5.59	25.37	263.2	0.309
214	7.72	33.91	3.02	150	8.80	33.42	4.80	25.93	210.8	0.428
319	6.49	34.05	2.14	200	7.95	33.86	3.63	26.41	166.3	0.522
427	5.88	34.13	1.02	250	7.11	33.99	2.60	26.63	145.8	0.599
531	5.21	34.24	0.45	300	6.62	34.04	2.24	26.74	136.2	0.671
637	4.51	34.25	0.37	400	6.02	34.10	1.39	26.86	125.4	0.801
845	4.09	34.42	0.32	500	5.42	34.22	0.57	27.03	110.1	0.919
1054	3.58	34.49	0.52	600	4.66	34.25	0.37	27.14	99.6	1.024
1255	3.11	34.54	1.05	700	4.35	34.29	0.35	27.21	94.1	1.121
				800	4.19	34.39	0.32	27.30	85.6	1.210
				1000	3.71	34.48	0.43	27.42	75.3	1.371

60.120

BLACK DOUGLAS; March 5, 1950; 2345 GCT; 35°37'N, 127°54'W; sounding, 2,620 fm; wind, 320°, force 3; weather, partly cloudy; sea, very rough; wire angle, 5°.

0	12.84	32.84	5.78	0	12.84	32.84	5.78	24.77	318.7	0.000
10	12.83	32.84	5.62	10	12.83	32.84	5.62	24.78	318.6	0.032
24	12.34	32.81	5.76	20	12.55	32.81	5.75	24.81	315.9	0.064
53	11.71	32.95	5.73	30	12.15	32.81	5.76	24.88	308.9	0.095
77	10.13	33.10	5.59	50	11.77	32.92	5.74	25.04	294.3	0.155
106	8.72	33.35	4.24	75	10.28	33.09	5.61	25.43	257.1	0.224
159	8.26	33.82	2.89	100	8.84	33.29	4.60	25.83	220.1	0.284
212	7.79	34.02	2.22	150	8.33	33.74	3.05	26.26	179.9	0.384
319	6.73	34.09	1.54	200	7.90	34.00	2.33	26.53	155.1	0.467
429	5.93	34.16	1.03	250	7.40	34.05	1.93	26.64	145.3	0.543
535	5.14	34.20	0.54	300	6.89	34.08	1.64	26.73	136.7	0.613
642	4.54	34.27	0.41	400	6.14	34.14	1.18	26.88	123.7	0.743
850	3.90	34.40	0.28	500	5.38	34.19	0.65	27.01	111.9	0.861
1060	3.48	34.47	0.34	600	4.75	34.24	0.45	27.12	101.5	0.968
1263	3.02	34.56	0.73	700	4.31	34.32	0.37	27.24	91.4	1.064
				800	4.03	34.38	0.30	27.31	84.6	1.152
				1000	3.60	34.44	0.32	27.40	77.0	1.314

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

60.130 BLACK DOUGLAS; March 5, 1950; 1500, 1638 GCT; 35°17'N, 123°37'W; sounding, 2,580 fm; wind, 320°, force 3; weather, cloudy; sea, high; wire angle, 33°, 31°.

0	13.96	32.99	5.39	0	13.96	32.99	5.39	24.67	328.8	0.000
8	13.99	33.03	5.49	10	13.97	33.03	5.47	24.69	326.7	0.033
21	13.95	32.95	5.34	20	13.95	32.95	5.34	24.64	332.2	0.066
46	14.21	33.10	5.45	30	14.02	32.98	5.34	24.64	331.7	0.099
68	14.25	33.10	5.44	50	14.22	33.10	5.47	24.70	327.2	0.165
92	12.83	33.15	5.48	75	14.22	33.10	5.44	24.70	327.9	0.247
137	9.72	32.99	5.17	100	12.07	33.14	5.45	25.15	284.8	0.323
				150	9.26	33.01	5.06	25.54	248.1	0.456
181	8.52a)	33.49	4.80	200	8.26	33.71	4.64	26.24	182.0	0.564
265	7.57	33.98	4.03	250	7.73	33.96	4.17	26.52	156.7	0.649
348	-	34.04	2.37	300	7.14	34.01	3.53	26.64	145.4	0.724
430	5.48	34.09	1.23	400	5.75	34.07	1.51	26.87	124.1	0.859
515	5.06	34.14	0.73	500	5.10	34.13	0.79	27.00	112.7	0.977
689	4.24	34.34	0.30	600	4.65	34.22	0.46	27.12	101.7	1.084
875	3.87	34.45	0.24	700	4.20	34.35	0.30	27.27	87.8	1.179
1060	3.44	34.49	-	800	4.01	34.42	0.24	27.35	81.5	1.263
				1000	3.57	34.48		27.44	73.4	1.419

61.55 BLACK DOUGLAS; March 8, 1950; 0250 GCT; 37°37'N, 123°07.5'W; sounding, 520 fm; wind, calm; weather, overcast; sea, slight; wire angle, 0°.

0	10.65	33.06	0	10.65	33.06		25.35	263.8	0.000
15	9.76	33.32	10	10.20	33.24		25.57	243.4	0.025
40	9.36	33.57	20	9.65	33.38		25.77	224.4	0.049
65	9.02	33.77	30	9.49	33.48		25.87	214.6	0.071
90	8.70	33.95	50	9.22	33.65		26.05	198.2	0.112
144	8.20	34.04	75	8.88	33.86		26.27	178.0	0.159
193	7.99	34.05	100	8.56	33.98		26.41	164.8	0.202
291	7.10	34.13	150	8.17	34.04		26.52	155.4	0.281
393	6.08	34.16	200	7.92	34.05		26.56	151.7	0.359
490	5.63	34.25	250	7.50	34.10		26.66	142.9	0.432
593	5.15	34.31	300	7.00	34.13		26.76	134.6	0.502
794	4.40	34.42	400	6.05	34.16		26.91	121.1	0.630
			500	5.58	34.26		27.04	108.9	0.745
			600	5.11	34.31		27.14	100.6	0.849
			700	4.73	34.37		27.23	92.5	0.946

65.60 BLACK DOUGLAS; March 2, 1950; 0858 GCT; 36°45'N, 123°00'W; sounding, 1,660 fm; wind, 320°, force, 3; weather, overcast; sea, very rough; wire angle, 15°.

0	10.92	32.99	4.85r	0	10.92	32.99	(6.32)	25.25	273.5	0.000
9	10.94	33.01	6.32	10	10.93	33.01	6.31	25.27	271.9	0.027
21	10.57	33.17	5.77	20	10.57	33.17	5.78	24.45	254.1	0.054
46	10.53	33.51	5.25	30	10.56	33.32	5.60	25.57	243.8	0.078
67	9.59	33.58	4.06	50	10.50	33.52	5.10	25.73	228.4	0.126
92	9.23	33.86	3.11	75	9.45	33.62	3.60	25.99	204.6	0.180
136	8.73	33.95	2.89	100	9.13	33.89	3.07	26.25	179.8	0.228
180	8.26	34.05	1.82	150	8.60	33.98	2.62	26.40	166.1	0.314
270	6.97	34.13	1.49	200	7.99	34.08	1.70	26.58	150.3	0.394
367	-	34.14	0.99	250	7.23	34.12	1.55	26.72	137.6	0.465
463	5.48	34.24	0.84	300	6.68	34.13	1.30	26.80	130.3	0.533
562	5.06b)	34.27	0.51	400	5.84	34.16	0.95	26.93	118.5	0.657
763	4.40	34.36	0.37	500	5.31	34.26	0.69	27.07	105.8	0.769
968	3.84	34.49	0.48	600	4.93	34.28	0.45	27.13	100.9	0.873
1168	3.36	34.51	0.76	700	4.59	34.32	0.38	27.21	94.6	0.970
				800	4.28	34.39	0.38	27.30	86.5	1.061
				1000	3.73	34.50	0.53	27.44	74.0	1.221

a) Alternate value, 8.82°C, not used in interpolation.
b) Alternate value, 5.14°C, not used in interpolation.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
BLACK DOUGLAS; March 2, 1950; 1836 GCT; 36°03'N, 122°02'W; sounding, 770 fm; wind, 320°, force 3; weather, cloudy; sea, moderate; wire angle, 31°.													70.55
0	11.39	33.52	5.69		0	11.39	33.52	5.69		25.57	242.5	0.000	
9	11.34	33.51	5.81		10	11.34	33.51	5.81		25.58	242.5	0.024	
22	11.31	33.55	5.73		20	11.32	33.54	5.74		25.60	240.0	0.048	
47	10.02	33.57	4.41		30	11.21	33.56	5.52		25.64	237.1	0.072	
68	9.20	33.66	3.35		50	9.73	33.57	4.28		25.90	212.3	0.117	
92	9.26	33.89	2.43		75	9.20	33.72	3.00		26.11	193.2	0.168	
137	8.76	34.04	2.00		100	9.24	33.95	2.26		26.28	177.2	0.214	
179	8.22	34.04	1.95		150	8.56	34.04	2.00		26.46	161.1	0.298	
260	7.42	34.13	-		200	7.98	34.05	(1.89)		26.55	152.6	0.377	
344	-	34.20	0.88		250	7.51	34.11	(1.62)		26.67	142.4	0.451	
425	6.00	34.20	0.66		300	7.07	34.18	(1.18)		26.79	131.9	0.520	
506	5.65a)	34.27	0.44		400	6.19	34.20	0.70		26.92	119.9	0.646	
676	4.90	34.36	0.26		500	5.67	34.26	0.47		27.03	110.5	0.761	
861	4.32	34.42	0.41		600	5.24	34.33	0.30		27.14	100.8	0.866	
1052	3.70	34.52	0.55		700	4.82	34.37	0.26		27.22	93.7	0.964	
					800	4.50	34.39	0.33		27.27	89.1	1.055	
					1000	3.86	34.50	0.54		27.43	75.5	1.219	
BLACK DOUGLAS; March 3, 1950; 0007 GCT; 35°53'N, 122°23'W; sounding, 1,780 fm; wind, 320°, force 3; weather, cloudy; sea, moderate; wire angle, 27°.													70.60
0	11.39	33.34	5.89		0	11.39	33.34	5.89		25.43	255.8	0.000	
9	11.41	33.33	5.66		10	11.40	33.33	5.65		25.43	256.7	0.026	
22	11.38	33.44	5.61		20	11.40	33.44	5.62		25.51	248.8	0.051	
49	11.27	33.42	5.85		30	11.36	33.44	5.75		25.52	248.5	0.076	
71	10.06	33.44	4.74		50	11.27	33.42	5.85		25.52	248.7	0.125	
98	9.16	33.58	3.60		75	9.83	33.46	4.55		25.80	222.4	0.184	
145	8.49	33.95	2.36		100	9.11	33.60	3.49		26.03	201.2	0.237	
190	7.70	34.07	1.90		150	8.42	33.96	2.28		26.42	165.0	0.329	
276	7.04	34.14	1.38		200	7.57	34.08	1.86		26.64	144.6	0.407	
368	6.66	34.20	0.78		250	7.15	34.13	1.58		26.74	135.9	0.476	
460	5.90	34.27	0.48		300	6.98	34.15	1.18		26.77	132.8	0.544	
553	5.15b)	34.27	0.30		400	6.42	34.23	0.65		26.91	120.8	0.620	
739	4.52	34.42	0.37		500	5.56	34.27	0.38		27.05	108.1	0.735	
934	3.96	34.50	0.44		600	4.95	34.29	0.30		27.14	100.2	0.839	
1128	3.52	34.54	0.69		700	4.66	34.39	0.35		27.25	90.3	0.934	
					800	4.35	34.45	0.39		27.33	83.1	1.021	
					1000	3.80	34.52	0.50		27.45	73.3	1.178	
BLACK DOUGLAS; March 3, 1950; 0707 GCT; 35°33'N, 123°06'W; sounding, 2,080 fm; wind, 340°, force 1; weather, partly cloudy; sea, moderate; wire angle, 0°.													70.70
0	11.92	33.21	6.08		0	11.92	33.21	6.08		25.24	274.0	0.000	
10	11.90	33.21	6.08		10	11.90	33.21	6.08		25.24	274.2	0.027	
25	11.50	33.24	6.09		20	11.62	33.23	6.09		25.31	268.1	0.054	
50	11.04	33.31	5.66		30	11.39	33.26	6.06		25.37	262.2	0.081	
75	10.63	33.33	5.10		50	11.04	33.31	5.66		25.47	253.0	0.133	
100	9.60	33.55	4.10		75	10.63	33.33	5.10		25.56	245.5	0.195	
154	8.19	33.87	2.67		100	9.60	33.55	4.10		25.91	212.7	0.252	
203	7.48	33.98	2.32		150	8.26	33.85	2.72		26.35	170.8	0.348	
301	6.30	34.11	1.54		200	7.52	33.97	2.34		26.56	152.1	0.429	
403	5.98	34.25	0.63		250	6.80	34.04	2.05		26.71	138.0	0.501	
500	5.39c)	34.29	0.48		300	6.31	34.11	1.54		26.83	127.0	0.567	
602	5.10d)	34.45	0.34		400	6.00	34.25	0.64		26.98	113.9	0.687	
802	4.34	34.43	0.38		500	5.39	34.29	0.48		27.09	104.8	0.797	
998	3.80	34.49	0.54		600	5.11	34.45	0.35		27.25	90.3	0.895	
1199	3.34	34.52	0.80		700	4.72	34.44	0.35		27.29	87.3	0.984	
					800	4.35	34.43	0.38		27.32	84.6	1.070	
					1000	3.80	34.49	0.55		27.42	75.5	1.230	

a) Alternate value, 5.72°C, not used in interpolation.
b) Alternate value, 5.22°C, not used in interpolation.
c) Alternate value, 5.60°C, not used in interpolation.
d) Alternate value, 5.17°C, not used in interpolation.

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

70.80 BLACK DOUGLAS; March 3, 1950; 1334 GCT; 35°13'N, 123°48'W; sounding, 2,200 fm; wind, 340°, force 1; weather, partly cloudy; sea, slight; wire angle, 26°.

0	12.09	33.03	5.62	0	12.09	33.03	5.62	25.06	291.2	0.000
9	12.03	33.08	5.56	10	12.04	33.08	5.56	25.11	286.4	0.029
22	11.83	33.08	5.64	20	11.88	33.08	5.64	25.15	283.6	0.057
45	10.69	33.08	5.34	30	11.49	33.08	5.58	25.22	277.2	0.085
68	9.84	33.13	4.93	50	10.50	33.08	5.25	25.39	260.8	0.139
90	9.43	33.24	4.32	75	9.70	33.16	4.79	25.59	241.3	0.202
137	8.58	33.71	2.95	100	9.23	33.32	3.56	25.79	223.9	0.260
178	7.93	33.87	2.80	150	8.32	33.78	2.92	26.29	176.9	0.360
259	7.18	34.00	1.88	200	7.74	33.92	2.58	26.49	158.9	0.444
344	6.32	34.06	1.33	250	7.28	33.99	1.97	26.61	148.0	0.521
424	5.92	34.13	0.87	300	6.75	34.03	1.58	26.71	138.7	0.592
509	5.48	34.23	0.49	400	6.04	34.11	1.02	26.87	124.8	0.724
681	4.68	34.36	0.33	500	5.50	34.22	0.51	27.02	110.8	0.842
858	4.12	34.43	0.38	600	5.00	34.31	0.35	27.15	99.4	0.947
1050	3.56	34.50	0.65	700	4.62	34.37	0.32	27.24	91.3	1.042
				800	4.30	34.41	0.35	27.31	85.5	1.131
				1000	3.70	34.48	0.57	27.43	75.0	1.292

70.90 BLACK DOUGLAS; March 3, 1950; 2035 GCT; 34°53'N, 124°30'W; sounding, 2,340 fm; wind, 340°, force 2; weather, partly cloudy; sea, rough; wire angle, 8°.

0	13.92	33.03	5.48	0	13.92	33.03	5.48	24.71	325.0	0.000
10	13.84	33.03	5.81	10	13.84	33.03	5.81	24.72	323.9	0.032
25	13.77	33.01	5.65	20	13.79	33.01	5.72	24.72	324.5	0.065
55	13.75	33.03	5.41	30	13.77	33.01	5.57	24.72	324.5	0.097
80	13.76	33.06	5.63	50	13.76	33.02	5.43	24.73	324.0	0.162
110	11.07	32.94	5.32	75	13.76	33.06	5.63	24.76	321.7	0.243
164	9.45	33.35	4.37	100	11.90	32.96	5.45	25.05	294.6	0.320
218	8.17	33.87	2.63	150	9.86	33.18	4.73	25.58	244.9	0.454
325	7.32	34.09	1.79	200	8.45	33.75	3.02	26.25	181.8	0.562
434	5.66	34.09	1.06	250	7.87	33.99	2.20	26.52	156.3	0.646
536	5.22	34.18	0.64	300	7.52	34.07	1.86	26.63	146.3	0.721
638	4.88	34.31	0.32	400	6.02	34.09	1.34	26.85	126.0	0.857
				500	5.34	34.13	0.74	26.97	115.8	0.978
				600	5.01	34.27	0.42	27.12	102.5	1.087

70.100 BLACK DOUGLAS; March 4, 1950; 0240 GCT; 34°33'N, 125°12'W; sounding, 2,480 fm; wind, 340°, force 3; weather, cloudy; sea, rough; wire angle, 26°.

0	14.18	33.17	5.47	0	14.18	33.17	5.47	24.75	320.5	0.000
9	14.15	33.15	5.46	10	14.15	33.15	5.46	24.75	321.3	0.032
23	13.69	33.10	5.44	20	13.74	33.10	5.44	24.79	317.1	0.064
50	13.53	33.10	5.48	30	13.64	33.10	5.45	24.81	315.9	0.096
72	13.41	33.12	5.16	50	13.53	33.10	5.48	24.84	313.4	0.159
99	12.80	33.11	5.37	75	13.40	33.12	5.16	24.88	310.4	0.237
148	10.31	33.28	4.80	100	12.78	33.11	5.36	25.00	299.7	0.313
197	8.89	33.77	2.89	150	10.15	33.30	4.70	25.62	240.8	0.448
288	7.94	34.02	2.12	200	8.84	33.78	2.87	26.21	185.4	0.555
379	6.74	34.09	1.52	250	8.34	33.96	2.42	26.43	165.4	0.642
464	6.04	34.20	0.75	300	7.76	34.03	2.04	26.57	152.8	0.721
548	5.33	34.23	0.50	400	6.56	34.11	1.29	23.80	131.6	0.864
722	4.62	34.33	0.30	500	5.64	34.22	0.59	27.00	112.9	0.986
912	4.05	34.47	0.39	600	5.09	34.25	0.44	27.09	104.8	1.095
1108	3.60	34.51	0.57	700	4.70	34.31	0.32	27.19	96.6	1.195
				800	4.36	34.41	0.31	27.30	86.0	1.287
				1000	3.84	34.50	0.47	27.43	75.4	1.449

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

BLACK DOUGLAS; March 4, 1950; 0936 GCT; 34°13'N, 125°54'W; sounding, 2,120 fm; wind, 320°, force 2; weather, cloudy; sea, rough; wire angle, 3°. 70.110

0	13.98	33.14	5.56	0	13.98	33.14	5.56	24.77	318.7	0.000
10	13.99	33.17	5.59	10	13.99	33.17	5.59	24.80	316.7	0.032
25	13.83	33.15	–	20	13.90	33.15	5.60	24.80	316.5	0.063
50	13.66	33.17	5.50	30	13.79	33.15	5.58	24.82	314.7	0.095
75	13.54	33.10	5.29	50	13.66	33.17	5.50	24.87	310.9	0.158
100	12.15	33.00	5.49	75	13.54	33.10	5.29	24.84	314.3	0.236
154	9.88	33.45	3.90	100	12.15	33.00	5.49	25.03	296.3	0.312
203	9.24	33.84	2.72	150	9.94	33.38	4.06	25.72	231.5	0.445
301	8.18	34.13	1.52	200	9.25	33.82	2.75	26.18	188.9	0.549
402	7.32	34.20	0.90	250	8.74	34.02	1.98	26.41	167.1	0.638
497	6.34	34.23	0.62	300	8.19	34.13	1.52	26.58	151.6	0.717
598	5.11a)	34.20	0.50	400	7.34	34.20	0.91	26.77	135.5	0.812
798	4.44	34.34	0.35	500	6.29	34.23	0.61	26.93	120.4	0.940
994	3.95	34.49	0.52	600	5.10	34.20	0.50	27.05	108.7	1.054
1197	3.36	34.53	0.80	700	4.65	34.25	0.41	27.14	100.5	1.158
				800	4.45	34.34	0.35	27.24	92.5	1.255
				1000	3.94	34.49	0.52	27.41	77.2	1.425

BLACK DOUGLAS; March 4, 1950; 1609 GCT; 33°53'N, 126°35.5'W; sounding, 2,560 fm; wind, 290°, force 1; weather, overcast; sea, moderate; wire angle, 18°. 70.120

0	13.64	33.00	5.86	0	13.64	33.00	5.86	24.74	322.1	0.000
10	13.58	32.98	5.72	10	13.58	32.98	5.72	24.75	321.1	0.032
24	12.71	33.04	5.68	20	13.10	33.04	5.68	24.88	309.1	0.064
47	12.00	33.06	5.68	30	12.53	33.05	5.67	25.00	298.0	0.094
71	11.40	33.12	5.62	50	11.89	33.07	5.68	25.14	285.2	0.152
95	10.87	33.13	5.59	75	11.30	33.12	5.60	25.28	271.8	0.222
147	9.26	33.51	3.97	100	10.72	33.14	5.56	25.40	261.2	0.289
193	8.52	33.91	2.65	150	9.20	33.55	3.82	25.97	207.3	0.406
280	7.35	34.05	2.23	200	8.40	33.93	2.59	26.40	167.7	0.499
366	6.74	34.18	1.11	250	7.65	34.01	2.37	26.57	151.9	0.579
449	6.07	34.18	0.51	300	7.20	34.08	2.01	26.69	141.0	0.653
538	5.68b)	34.25	0.32	400	6.43	34.18	0.81	26.87	124.7	0.786
718	4.60	34.38	0.30	500	5.86	34.20	0.37	26.96	117.0	0.906
902	4.00	34.41	0.42	600	5.28	34.31	0.32	27.12	102.8	1.016
1097	3.52	34.47	0.61	700	4.68	34.37	0.30	27.24	91.8	1.114
				800	4.31	34.40	0.34	27.30	85.0	1.202
				1000	3.75	34.45	0.51	27.40	77.2	1.364

BLACK DOUGLAS; March 4, 1950; 2145 GCT; 33°33'N, 127°16.5'W; sounding, 2,420 fm; wind, 300°, force 1; weather, cloudy; sea, very rough; wire angle, 13°. 70.130

0	14.68	33.08	5.81	0	14.68	33.08	5.81	24.58	236.7	0.000
10	14.07	33.08	5.73	10	14.07	33.08	5.73	24.71	325.0	0.033
25	13.70	33.06	5.78	20	13.79	33.07	5.77	24.76	320.1	0.065
49	13.19	33.03	5.66	30	13.65	33.05	5.78	24.77	319.3	0.097
73	12.48	33.04	5.48	50	13.12	33.03	5.65	24.87	311.6	0.160
98	11.54	33.06	4.78	75	12.45	33.04	5.44	25.00	298.3	0.237
151	9.44	33.48	4.35	100	11.51	33.06	4.76	25.20	280.5	0.309
200	8.52	33.87	2.96	150	9.46	33.47	4.38	25.87	217.2	0.434
296	7.35	34.09	2.28	200	8.52	33.87	2.96	26.33	174.2	0.531
396	6.21	34.11	1.29	250	7.88	34.03	2.60	26.55	153.5	0.613
490	5.45	34.18	0.62	300	7.31	34.09	2.25	26.68	141.8	0.687
590	5.01c)	34.23	0.42	400	6.18	34.11	1.25	26.85	126.5	0.821
786	4.24	34.40	0.26	500	5.40	34.19	0.60	27.01	112.1	0.941
980	3.64	34.47	0.52	600	4.98	34.24	0.40	27.10	104.2	1.049
1181	3.21	34.51	0.84	700	4.55	34.34	0.30	27.23	92.6	1.147
				800	4.20	34.41	0.27	27.32	84.3	1.236
				1000	3.59	34.47	0.55	27.43	74.5	1.394

a) Alternate value, 5.19°C, not used in interpolation.
b) Alternate value, 5.60°C, not used in interpolation.
c) Alternate value, 5.08°C, not used in interpolation.

SIO

CCOFI 5003

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
80.55	**CREST; March 2, 1950; 2027 GCT; 34°19'N, 120°48'W; sounding, 480 fm; wind, 320°, force 5; weather, overcast; sea, rough; wire angle, 11°.**											
0	11.81	33.58	6.31	0.60	0	11.81	33.58	6.31	0.60	25.54	245.4	0.000
10	11.68	33.58	6.46	0.67	10	11.68	33.58	6.46	0.67	25.57	242.8	0.024
24	11.33	33.60	5.58	0.99	20	11.35	33.60	5.94	0.81	25.64	236.1	0.048
49	9.64	33.63	3.65	1.84	30	11.29	33.60	5.05	1.30	25.65	235.5	0.072
73	9.19	33.87	2.57	2.22	50	9.57	33.64	3.60	1.92	25.99	204.2	0.116
97	8.99	33.96	2.35	2.24	75	9.16	33.88	2.55	2.23	26.24	180.6	0.164
149	8.49	34.09	1.85	2.48	100	8.96	33.97	2.33	2.25	26.34	171.4	0.208
197	8.06	34.16	1.43	-	150	8.48	34.09	1.84	(2.49)	26.51	156.4	0.290
245	7.72	34.20	1.22	-	200	8.04	34.16	1.43	(2.64)	26.63	145.4	0.366
293	7.38	34.23	0.97	-	250	7.68	34.20	1.19	(2.75)	26.71	138.1	0.436
347	6.97	34.25	0.74	2.98	300	7.32	34.23	0.93	(2.87)	26.79	131.6	0.504
395	6.60	34.25	0.79	3.07	400	6.55	34.25	0.77	3.08	26.91	121.1	0.630
493	6.04	34.31	0.48	3.10	500	6.03	34.31	0.46	3.10	27.03	111.0	0.746
597	5.64	34.33	0.33	3.20	600	5.63	34.33	0.35	3.20	27.09	105.8	0.855
697	4.97	34.40	0.34	3.24	700	(4.96)	(34.40)	(0.35)	(3.24)	(27.23)	(93.0)	(0.954)
80.60	**CREST; March 3, 1950; 0040 GCT; 34°09'N, 121°09'W; sounding, 1,200 fm; wind, 330°, force 5; weather, cloudy; sea, moderate; wire angle, 32°.**											
0	11.66	33.51	6.34	0.79	0	11.66	33.51	6.34	0.79	25.51	248.0	0.000
9	11.59	33.49	6.40	0.83	10	11.58	33.49	6.40	0.83	25.52	248.0	0.025
20	11.56	33.53	6.27	0.85	20	11.56	33.53	6.27	0.85	25.55	244.8	0.049
42	11.34	33.51	5.85	0.98	30	11.47	33.52	6.12	0.90	25.56	244.4	0.074
60	10.65	33.57	4.76	1.34	50	11.17	33.52	5.50	1.12	25.61	239.8	0.122
80	9.40	33.68	3.61	1.63	75	9.53	33.65	3.80	1.57	26.00	203.7	0.178
115	8.58	33.87	3.12	1.87	100	8.78	33.79	3.27	1.77	26.23	182.0	0.226
150	8.20	33.95	3.12	2.01	150	8.20	33.95	3.12	2.01	26.44	162.5	0.312
221	7.38	34.04	2.40	2.25	200	7.56	34.02	2.71	2.17	26.59	148.9	0.390
298	6.98	34.16	1.28	2.63	250	7.24	34.08	1.91	2.41	26.68	140.8	0.462
376	6.46	34.22	0.89	2.88	300	6.96	34.16	1.26	2.63	26.79	131.8	0.531
605p	5.40	34.36	0.44	3.10	400	(6.33)	(34.23)	(0.79)	(2.90)	(26.93)	(119.6)	(0.656)
846p	4.31	34.43	0.71	3.11	500	(5.93)	(34.30)	(0.50)	(3.01)	(27.03)	(110.5)	(0.772)
					600	(5.42)	(34.36)	(0.44)	(3.10)	(27.14)	(100.9)	(0.877)
					700	4.93	34.39	0.51	3.08	27.22	93.5	(0.975)
					800	4.49	34.42	0.64	3.11	27.30	86.7	(1.065)
					1000	(3.90)	(34.47)			(27.40)	(78.2)	(1.229)
80.70	**CREST; March 3, 1950; 0653 GCT; 38°48'N, 121°50'W; sounding, 2,050 fm; wind, 320°, force 5; weather, cloudy; sea, very rough; wire angle, 36°.**											
0	11.73	33.19	6.12	0.69	0	11.73	33.19	6.12	0.69	25.26	272.6	0.000
9	11.69	33.15	6.06	0.66	10	11.69	33.15	6.07	0.66	25.23	275.0	0.027
21	11.71	33.15	6.10	0.73	20	11.70	33.15	6.10	0.73	25.23	275.5	0.055
44	11.64	33.17	6.16	0.67	30	11.70	33.15	6.15	0.70	25.23	275.8	0.082
63	11.51	33.26	6.13	0.81	50	11.59	33.19	6.15	0.69	25.28	271.3	0.137
86	10.13	33.35	5.09	1.31	75	11.47	33.30	5.73	1.08	25.39	261.6	0.204
125	8.90	33.75	3.09	1.92	100	9.38	33.42	4.18	1.59	25.84	218.8	0.264
164	8.44	33.95	2.47	2.08	150	8.58	33.90	2.64	2.03	26.34	171.1	0.362
241	7.65	34.11	1.66	2.47	200	8.08	34.05	2.03	2.26	26.54	154.1	0.443
322	6.66	34.13	1.23	2.78a)	250	7.54	34.12	1.59	2.49	26.67	142.0	0.517
399	6.26	34.20	0.66	2.88	300	6.85	34.12	1.34	2.72	26.77	133.4	0.586
477	5.84	34.27	0.51	2.98	400	6.25	34.20	0.66	2.88	26.91	120.8	0.713
626	5.14	34.33	0.38	3.16	500	5.71	34.28	0.48	3.00	27.04	109.3	0.828
785	4.37	34.42	0.44	3.26	600	5.26	34.32	0.38	3.13	27.13	101.8	0.933
966	3.90	34.43	0.66	3.36	700	4.75	34.37	0.40	3.25	27.23	92.8	1.030
					800	4.32	34.42	0.46	3.26	27.31	84.9	1.120
					1000	(3.82)	(34.44)	(0.72)	(3.35)	(27.38)	(79.4)	(1.284)

a) Mean value of 2.67 and 2.89 μg at/L.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

CREST; March 3, 1950; 1341 GCT; 33°26'N, 122°32'W; sounding, 2,250 fm; wind, 320°, force 4; weather, partly cloudy; sea, rough; wire angle, 27°. 80.80

0	12.44	33.31	6.12	0.61	0	12.44	33.31	6.12	0.61	25.21	276.9	0.000	
9	12.38	33.33	6.08	0.64	10	12.38	33.33	6.08	0.64	25.24	274.1	0.028	
22	12.39	33.30	6.03	0.68	20	12.39	33.24	6.05	0.67	25.17	281.3	0.055	
49	12.21	33.30	6.14	0.68	30	12.36	33.22	6.07	0.68	25.16	282.4	0.083	
72	12.17	33.33	4.70	0.68	50	12.21	33.30	6.14	0.68	25.25	274.1	0.139	
98	11.39	33.37	5.94r	0.71	75	12.15	33.33	4.28	0.68	25.29	271.5	0.207	
118p	10.73	33.46	2.61	1.29	100	11.29	33.38	3.00	0.72	25.49	252.9	0.273	
216p	8.00	33.96	1.70	2.14	150	9.59	33.66	2.26	1.72	26.00	205.1	0.388	
320p	6.62	34.07	1.12	2.52	200	8.33	33.91	1.83	2.07	26.39	168.2	0.481	
419p	5.82	34.13	0.57	2.92	250	7.48	34.01	1.52	2.26	26.60	149.3	0.560	
518p	5.36	34.20	0.43	2.94	300	6.84	34.06	1.24	2.45	26.72	137.7	0.632	
713p	4.64	34.34	0.59	3.17	400	5.94	34.12	0.64	2.87	26.89	122.7	0.762	
906p	3.98	34.45	0.57	3.19	500	5.45	34.19	0.44	2.94	27.00	112.7	0.880	
1140p	3.46	34.49	0.81	3.08	600	5.07	34.26	0.50	3.04	27.10	103.8	0.988	
					700	4.69	34.33	0.58	3.17	27.20	94.9	1.087	
					800	4.31	34.40	0.59	3.19	27.30	86.2	1.178	
					1000	3.72	34.48	0.64	3.16	27.42	75.0	1.339	

CREST; March 3, 1950; 2006 GCT; 33°03.5'N, 123°13'W; sounding, 2,150 fm; wind, 340°, force 4; weather, partly cloudy; sea, high; wire angle, 12°. 80.90

0	13.11	33.19	6.00	0.48	0	13.11	33.19	6.00	0.48	24.99	297.9	0.000	
10	13.00	33.19	6.12	0.48	10	13.00	33.19	6.12	0.48	25.01	296.3	0.030	
24	12.70	33.12	6.01	0.51	20	12.74	33.13	6.05	0.50	25.02	295.8	0.059	
53	11.82	33.22	5.87	0.65	30	12.63	33.12	5.98	0.53	25.03	294.8	0.089	
76	11.91	33.35	6.03	0.64	50	11.83	33.20	5.87	0.65	25.25	274.7	0.146	
105	10.22	33.44	4.61	1.25	75	11.91	33.34	6.04	0.64	25.34	266.3	0.213	
158	8.48	33.86	3.10	1.87	100	10.54	33.42	5.00	1.00	25.65	237.5	0.276	
211	7.78	33.98	2.73	2.02	150	8.60	33.81	3.19	1.83	26.27	178.7	0.381	
316	6.65	34.13	1.23	2.48	200	7.92	33.96	2.82	1.99	26.49	158.5	0.465	
426	5.84	34.18	0.74	2.79	250	7.34	34.05	2.22	2.18	26.65	144.3	0.541	
531	5.26	34.27	0.46	2.90	300	6.80	34.12	1.42	2.41	26.77	132.7	0.610	
637	4.89	34.29	0.44	2.93	400	5.99	34.17	0.81	2.74	26.92	119.6	0.736	
844	4.21	34.42	0.47	3.06a)	500	5.42	34.24	0.52	2.88	27.05	108.6	0.850	
1053	3.62	34.49	0.71	3.02	600	5.00	34.28	0.45	2.92	27.13	101.6	0.955	
1254	3.16	34.54	0.96	2.95	700	4.67	34.32	0.44	2.99	27.20	95.5	1.053	
					800	4.36	34.39	0.45	3.05	27.29	87.6	1.145	
					1000	3.77	34.48	0.64	3.00	27.42	75.8	1.309	

CREST; March 4, 1950; 0256 GCT; 32°48'N, 123°56'W; sounding, 2,250 fm; wind, 340°, force 5; weather, partly cloudy; sea, very rough; wire angle, 35°. 80.100

0	15.23	33.46	5.56	0.38	0	15.23	33.46	5.56	0.38	24.75	320.4	0.000	
8	15.20	33.40	5.68	0.40	10	15.21	33.40	5.67	0.40	24.71	324.3	0.032	
21	15.23	33.39	5.53	0.40	20	15.24	33.39	5.53	0.40	24.70	325.9	0.065	
45	14.52	33.30	5.83	0.41	30	15.21	33.37	5.59	0.40	24.69	327.2	0.097	
65	13.28	33.03	5.88	0.46	50	13.82	33.22	5.84	0.42	24.87	310.4	0.161	
87	13.54	33.19	5.82	-	75	13.39	33.05	5.87	0.48	24.83	315.3	0.239	
128	13.46	33.84	5.22	0.63	100	13.54	33.43	5.72	0.54	25.09	291.0	0.315	
166	9.43	33.46	4.50	1.47	150	10.17	33.49	4.75	1.10	25.77	227.0	0.444	
240	8.20	33.93	4.29	1.52	200	8.81	33.71	4.35	1.50	26.16	190.3	0.519	
320	7.06	33.95	2.68	2.23b)	250	8.04	33.93	4.24	1.54	26.45	163.3	0.637	
396	6.41	34.07	1.39	2.65	300	7.33	33.94	3.40	1.81	26.56	153.2	0.716	
473	5.30	34.05	1.26	2.62	400	6.38	34.07	1.38	2.65	26.79	132.0	0.859	
628	4.70	34.23	0.52	3.00	500	5.13	34.07	1.17	2.65	26.95	117.5	0.983	
799	4.21	34.38	0.44	3.03	600	4.78	34.20	0.59	2.95	27.09	104.8	1.095	
984	3.70	34.50	0.69	3.02	700	4.49	34.30	0.46	3.03	27.20	94.9	1.194	
					800	4.20	34.38	0.44	3.03	27.30	86.5	1.285	
					1000	(3.65)	(34.50)	(0.74)	(3.02)	(27.44)	(73.0)	(1.444)	

a) Mean value of 2.95 and 3.18 μg at/L.
b) Alternate value, 2.39 μg at/L, not used in interpolation.

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

80.110 CREST; March 4, 1950; 1000 GCT; 32°29'N, 124°34'W; sounding, 2,350 fm; wind, 340°, force 5; weather, threatening sky; sea, high; wire angle, 14°.

0	15.37	33.50	5.68	0.43	0	15.37	33.50	5.68	0.43	24.76	320.2	0.000
10	15.34	33.50	5.66	0.49	10	15.34	33.50	5.66	0.49	24.76	319.9	0.032
24	15.36	33.50	5.71	0.44	20	15.35	33.50	5.70	0.45	24.76	320.3	0.064
53	15.28	33.50	5.73	0.44	30	15.36	33.50	5.73	0.44	24.75	320.7	0.096
76	15.21	33.51	5.71	0.46	50	15.31	33.50	5.74	0.44	24.77	320.4	0.160
105	14.42	33.49	5.74	0.46	75	15.21	33.51	5.71	0.46	24.80	318.3	0.240
157	11.95	33.62	5.14	0.77	100	14.86	33.49	5.73	0.46	24.86	312.9	0.319
211	9.70a)	33.71	4.75	1.26	150	12.33	33.60	5.20	0.70	25.46	256.8	0.461
316	7.62	33.98	3.25	2.06	200	10.10	33.69	4.84	1.15	25.92	212.1	0.579
427	6.16	34.05	1.53	2.64	250	8.75	33.81	4.30	1.58	26.25	182.8	0.677
534	5.35	34.13	0.89	2.84	300	7.88	33.96	3.51	1.96	26.50	159.5	0.763
640	4.97	34.25	0.44	2.97	400	6.48	34.03	1.88	2.54	26.75	136.3	0.911
850	4.24	34.38	0.32	2.98	500	5.55	34.10	1.06	2.79	26.92	120.6	1.039
1062	3.61	34.45	0.63	3.08	600	5.10	34.20	0.58	2.95	27.05	108.7	1.054
1265	3.14	34.51	0.86	2.84	700	4.74	34.30	0.39	2.98	27.17	97.9	1.257
					800	4.39	34.36	0.35	2.98	27.26	90.1	1.351
					1000	3.79	34.43	0.48	3.04	27.38	79.7	1.521

80.120 CREST; March 4, 1950; 1700 GCT; 32°10'N, 125°13'W; sounding, 2,375 fm; wind, 340°, force 4; weather, threatening sky; sea, very rough; wire angle, 15°.

0	15.44	33.49	5.61	0.36	0	15.44	33.49	5.61	0.36	24.74	322.1	0.000
10	15.40	33.49	5.63	0.43	10	15.40	33.49	5.63	0.43	24.74	321.9	0.032
24	15.42	33.53	5.65	0.36	20	15.42	33.52	5.65	0.37	24.76	320.5	0.064
52	15.08	33.49	5.54	0.34	30	15.42	33.53	5.65	0.35	24.77	319.9	0.096
76	15.09	33.48	5.71	0.39	50	15.10	33.49	5.54	0.34	24.81	316.8	0.160
104	13.14	33.40	5.71	0.50	75	15.08	33.48	5.71	0.39	24.80	317.8	0.239
157	10.64	33.48	4.90	1.03	100	13.85	33.40	5.72	0.48	25.00	299.2	0.316
210	9.20	33.82	4.01	1.50	150	10.87	33.46	5.02	0.94	25.62	241.0	0.451
314	7.70	34.09	2.07	2.25	200	9.43	33.76	4.19	1.43	26.10	196.2	0.561
424	6.77	34.18	0.94	2.63	250	8.47	33.97	3.28	1.83	26.42	166.6	0.652
530	5.86	34.23	0.57	2.85	300	7.83	34.07	2.32	2.17	26.59	150.7	0.731
635	5.30	34.31	0.45	2.86	400	6.96	34.16	1.09	2.57	26.79	133.3	0.873
843	4.33	34.38	0.46	2.96	500	6.09	34.22	0.65	2.80	26.95	118.4	0.999
1054	3.83	34.43	0.71	2.87	600	5.47	34.29	0.47	2.86	27.08	106.6	1.111
1258	3.29	34.51	0.99	2.90	700	4.99	34.34	0.45	2.89	27.18	97.9	1.213
					800	4.49	34.37	0.45	2.95	27.26	90.5	1.307
					1000	3.92	34.42	0.63	2.90	27.36	82.0	1.480

80.130 CREST; March 4, 1950; 2309 GCT; 31°49'N, 125°56'W; sounding, 2,300 fm; wind, 340°, force 3; weather, overcast; sea, very rough; wire angle, 10°.

0	15.69	33.53	5.66	0.45	0	15.69	33.53	5.66	0.45	24.71	324.7	0.000
10	15.62	33.49	5.61	0.46	10	15.62	33.49	5.61	0.46	24.69	326.7	0.032
25	15.60	33.48	5.64	0.45	20	15.61	33.48	5.63	0.45	24.69	327.4	0.065
49	15.42	33.48	5.67	0.42	30	15.55	33.48	5.64	0.44	24.70	326.1	0.098
73	15.44	33.51	5.60	0.44	50	15.42	33.48	5.67	0.42	24.73	324.1	0.163
97	15.35	33.51	5.63	0.44	75	15.44	33.51	5.61	0.44	24.75	323.3	0.244
149	12.56	33.64	5.16	0.70	100	15.31	33.51	5.62	0.45	24.78	321.0	0.324
197	9.31	33.69	3.99	1.65	150	12.45	33.64	5.15	0.72	25.47	256.1	0.468
293	7.78	34.04	2.22	2.32	200	9.22	33.70	3.95	1.69	26.09	197.3	0.583
392	6.93	34.11	1.15	2.77	250	8.26	33.88	2.94	2.05	26.38	170.2	0.674
488	6.10	34.20	0.67	2.98	300	7.69	34.05	2.13	2.36	26.60	150.2	0.754
588	5.43	34.22	0.42	3.07	400	6.85	34.12	1.48	2.79	26.77	134.8	0.896
784	4.81	34.38	0.30	3.17	500	6.00	34.20	0.63	3.00	26.94	118.8	1.023
976	4.09	34.42	0.48	3.14	600	5.38	34.23	0.39	3.08	27.04	110.0	1.138
1179	3.48	34.49	0.82	3.28	700	5.07	34.31	0.31	3.15	27.14	101.2	1.243
					800	4.75	34.39	0.30	3.17	27.24	92.3	1.340
					1000	4.01	34.43	0.50	3.14	27.35	82.4	1.515

a) Alternate value, 9.47°C, not used in interpolation.

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

83.80

PAOLINA-T; March 10, 1950; 2255 GCT; 32°55'N, 122°06'W; sounding, 2,500 fm; wind, 320°, force 6; weather, partly cloudy; sea, very rough; wire angle, 25°.

0	13.04	33.22	5.96	0.59	0	13.04	33.22	5.96	0.59	25.03	294.4	0.000
9	12.99	33.24	6.12	0.67	10	13.00	33.24	6.12	0.69	25.05	292.3	0.029
27	13.00	33.21	6.04	0.77	20	13.00	33.21	6.08	0.76	25.03	294.8	0.059
54	12.98	33.21	6.04	0.66	30	13.00	33.21	6.04	0.77	25.03	295.0	0.088
82	12.09	33.25	5.94	0.90	50	13.00	33.21	6.05	0.67	25.03	295.5	0.147
109	10.10	33.39	4.74	1.55	75	12.65	33.23	6.00	0.80	25.11	288.0	0.220
163	8.53	33.88	2.78	2.23	100	10.53	33.33	5.40	1.33	25.58	243.9	0.287
218	7.86	34.03	2.34	2.42	150	8.75	33.72	2.97	2.16	26.18	187.5	0.395
328	6.39	34.05	1.62	2.77	200	8.09	34.02	2.45	2.37	26.51	156.5	0.480
432	5.86	34.18	0.74	2.92	250	7.40	34.03	2.13	2.53	26.62	146.6	0.556
541	5.30	34.25	0.49	3.09	300	6.64	34.04	1.82	2.70	26.73	136.5	0.627
646	4.77	34.29	0.42	3.05	400	6.01	34.13	0.92	2.89	26.89	122.9	0.757
860	4.10	34.43	0.55	3.16	500	5.53	34.24	0.53	3.03	27.03	109.9	0.873
1064	3.58	34.51	0.75	3.14	600	4.97	34.26	0.44	3.07	27.12	102.7	0.979
1265	3.14	34.52	1.04	3.15	700	4.55	34.33	0.46	3.07	27.22	93.3	1.077
					800	4.25	34.39	0.51	3.14	27.30	86.4	1.167
					1000	3.75	34.49	0.67	3.14	27.43	74.9	1.328

83.90

PAOLINA-T; March 10, 1950; 1520 GCT; 32°42'N, 122°49'W; sounding, 2,400 fm; wind, 320°, force 5; weather, cloudy; sea, very rough; wire angle, 25°.

0	12.86	33.22	6.02	0.45	0	12.86	33.22	6.02	0.45	25.06	290.9	0.000
9	12.83	33.23	6.08	0.51	10	12.84	33.23	6.08	0.52	25.08	290.0	0.029
23	12.84	33.23	6.07	0.57	20	12.84	33.23	6.08	0.56	25.08	290.3	0.058
49	12.80	33.23	6.05	0.59	30	12.83	33.23	6.05	0.58	25.08	290.3	0.087
72	11.17	33.24	5.52	1.00	50	12.77	33.23	6.04	0.58	25.09	289.6	0.145
98	9.78	33.40	4.29	-	75	10.85	33.24	5.40	1.17	25.45	255.3	0.213
146	8.52	33.92	2.89	1.95	100	9.68	33.45	4.13	1.63	25.82	221.2	0.273
195	7.86	34.00	2.48	2.16	150	8.47	33.93	2.88	1.97	26.38	168.0	0.370
292	6.72	34.06	1.63	2.56	200	7.80	34.01	2.45	2.19	26.55	153.1	0.450
394	5.88	34.10	1.10	2.96	250	7.17	34.04	1.98	2.40	26.66	142.7	0.525
491	5.08	34.14	0.79	3.02	300	6.63	34.06	1.57	2.59	26.75	134.8	0.593
591	4.81	34.24	0.49	3.13	400	5.82	34.10	1.07	2.98	26.89	122.8	0.722
783	4.36	34.40	0.39	3.12	500	5.03	34.14	0.76	3.07	27.01	111.2	0.839
981	3.80	34.48	0.64	3.17	600	4.82	34.25	0.47	3.13	27.12	101.6	0.946
1178	3.34	34.50	0.84	2.92r	700	4.61	34.34	0.37	3.13	27.22	93.4	1.043
					800	4.30	34.41	0.41	3.12	27.31	85.4	1.132
					1000	3.75	34.48	0.67	(3.17)	27.42	75.6	1.294

87.35

PAOLINA-T; March 12, 1950; 2154 GCT; 33°50'N, 118°38'W; sounding, 320 fm; wind, 220°, force 2; weather, partly cloudy; sea, slight; wire angle, 1°.

0	13.67	33.51	6.13	0.37	0	13.67	33.51	6.13	0.37	25.13	285.0	0.000
10	13.26	33.49	6.13	0.34	10	13.26	33.49	6.13	0.34	25.19	279.0	0.028
25	13.18	33.51	6.12	0.38	20	13.21	33.50	6.13	0.36	25.21	277.6	0.056
50	10.94	33.55	4.03	1.30	30	13.13	33.52	6.07	0.46	25.24	274.7	0.084
75	9.99	33.76	3.10	1.98	50	10.94	33.55	4.03	1.30	25.68	233.6	0.134
100	9.60	33.82	2.71	2.09	75	9.99	33.76	3.10	1.98	26.01	202.7	0.189
155	8.88	34.00	2.13	2.39	100	9.60	33.82	2.71	2.09	26.12	192.2	0.238
205	8.47	34.11	1.76	2.57	150	8.94	33.98	2.18	2.37	26.35	171.4	0.329
254	8.06	34.14	1.38	2.73	200	8.50	34.10	1.79	2.55	26.51	156.7	0.412
304	7.62	34.14	1.11	2.79	250	8.11	34.14	1.45	2.72	26.60	148.9	0.488
359	7.15	34.20	0.83	2.93	300	7.66	34.14	1.14	2.78	26.67	143.1	0.560
409	6.84	34.23	0.74	3.05	400	6.88	34.22	0.76	3.03	26.84	127.8	0.696
459	6.59	34.31	0.55	3.16a)	500	6.23	34.31	0.40	3.23	27.00	113.7	0.817
508	6.12	34.31	0.38	3.24								

a) Mean value of 3.01 and 3.31 μg at/L.

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
87.40	PAOLINA-T; March 13, 1950; 0343 GCT; 33°40'N, 118°58'W; sounding, 520 fm; wind, 300°, force 3; weather, clear; sea, moderate; wire angle, 30°.											
0	13.53	33.49	6.04	0.51	0	13.53	33.49	6.04	0.51	25.14	283.7	0.000
9	13.35	33.49	6.10	0.59	10	13.33	33.49	6.09	0.59	25.18	279.7	0.028
22	12.92	33.48	6.01	0.62	20	12.97	33.48	6.03	0.61	25.24	274.4	0.056
44	12.60	33.48	5.76	0.73	30	12.78	33.48	5.95	0.64	25.28	271.0	0.083
64	10.95	33.55	4.19	1.39	50	12.42	33.48	5.45	0.82	25.35	265.1	0.137
84	10.02	33.68	3.42	1.75	75	10.37	33.63	3.66	1.64	25.84	218.5	0.197
129	9.26	33.89	2.57	2.03a)	100	9.70	33.76	3.03	1.86	26.06	198.5	0.249
170	8.80	34.04	2.15	2.30	150	9.02	33.97	2.33	2.17	26.33	173.2	0.342
254	7.84	34.18	1.40	2.58	200	8.43	34.11	1.85	2.42	26.53	154.8	0.424
344	7.18	34.20	0.89	2.81	250	7.89	34.18	1.42	2.57	26.67	142.5	0.499
431	6.61	34.29	0.56	2.88	300	7.47	34.19	1.10	2.70	26.74	136.6	0.568
526	5.90	34.29	0.36	2.97	400	6.82	34.25	0.65	2.86	26.88	124.8	0.699
619	5.40	34.36	0.27	2.92	500	6.12	34.29	0.39	2.95	27.00	113.7	0.818
720	5.21	34.36	0.27	3.10	600	5.46	34.35	0.28	3.00	27.13	102.2	0.926
819	5.08	34.38	0.64	3.13	700	5.24	34.36	0.25	3.08	27.16	99.6	1.027
					800	5.12	34.37	0.59	3.12	27.19	98.4	1.126
87.60	PAOLINA-T; March 13, 1950; 1621 GCT; 32°59'N, 120°21'W; sounding, 495 fm; wind, 330°, force 2; weather, overcast; sea, rough; wire angle, 1°.											
0	12.60	33.26	6.12	0.59	0	12.60	33.26	6.12	0.59	25.14	283.2	0.000
10	12.55	33.27	6.15	0.64	10	12.55	33.27	6.15	0.64	25.16	281.7	0.028
25	12.57	33.27	6.11	0.59	20	12.58	33.27	6.12	0.61	25.16	282.7	0.056
50	12.57	33.27	6.08	0.62	30	12.59	33.27	6.10	0.59	25.15	283.0	0.085
75	12.02	33.28	5.89	0.81	50	12.57	33.27	6.08	0.62	25.16	283.3	0.141
99	10.29	33.37	5.07	1.36	75	12.02	33.28	5.89	0.81	25.27	272.9	0.211
153	8.86	33.75	3.60	1.99	100	10.18	33.39	5.04	1.37	25.69	233.4	0.274
203	8.22	33.96	2.91	2.34	150	8.90	33.73	3.68	1.96	26.16	189.3	0.380
252	7.55	34.05	2.13	2.59	200	8.27	33.95	2.95	2.32	26.43	164.3	0.468
302	7.08	34.08	1.63b)	2.83	250	7.59	34.05	2.15	2.58	26.61	147.8	0.547
406	6.31	34.18	0.91	3.18	300	7.10	34.08	1.65	2.82	26.70	139.7	0.618
506	5.78	34.25	0.50	3.31	400	6.37	34.17	0.95	3.16	26.87	124.6	0.750
611	5.26	34.32	0.36	3.50	500	5.82	34.24	0.52	3.30	27.00	113.5	0.869
711	4.86	34.36	0.38	3.51	600	5.32	34.31	0.38	3.49	27.11	103.3	0.978
815	4.55	34.38	0.42	3.47	700	4.90	34.36	0.37	3.51	27.20	95.4	1.079
					800	4.60	34.38	0.41	3.48	27.25	91.3	1.170
87.70	PAOLINA-T; March 13, 1950; 2250 GCT; 32°39'N, 121°02'W; sounding, 2,250 fm; wind, 330°, force 2; weather, overcast; sea, rough; wire angle, 23°.											
0	13.96	33.22	5.99	0.50	0	13.96	33.22	5.99	0.50	24.84	312.0	0.000
10	13.83	33.22	6.01	0.49	10	13.83	33.22	6.01	0.49	24.87	309.6	0.031
24	13.68	33.22	6.02	0.51	20	13.71	33.22	6.02	0.50	24.89	307.7	0.062
51	13.08	33.15	6.05	0.57	30	13.55	33.21	6.02	0.52	24.92	305.6	0.093
74	12.24	33.19	6.04	0.70	50	13.08	33.15	6.05	0.57	24.97	301.4	0.153
102	11.36	33.22	5.75	0.96	75	12.19	33.19	6.04	0.71	25.17	282.6	0.226
151	9.10	33.63	3.68	1.75	100	11.40	33.22	5.80	0.95	25.34	266.8	0.295
201	8.42	33.89	2.86	2.01	150	9.14	33.61	3.73	1.72	26.03	201.8	0.412
300	6.68	34.38r	2.41	2.40	200	8.48	33.89	2.89	2.00	26.35	171.9	0.505
404	6.02	34.14	1.15	2.97	250	7.36	(33.97)	2.63	2.18	(26.58)	(150.4)	(0.586)
504	5.46	34.22	0.60	3.05	300	6.68	(34.03)	2.41	2.40	(26.72)	(137.6)	(0.658)
604	4.75	34.25	0.31	3.19	400	6.06	(34.13)	1.18	2.95	(26.88)	(123.4)	(0.789)
800	4.38	34.40	0.42	3.31	500	5.49	34.21	0.63	3.13	27.01	111.6	(0.906)
1001	3.86	34.48	0.63	3.31	600	4.75	34.25	0.33	3.18	27.13	100.8	(1.012)
1200	3.44	34.52	0.88	3.31	700	4.54	34.33	0.34	3.25	27.22	93.3	(1.109)
					800	4.38	34.40	0.42	3.31	27.29	87.1	(1.199)
					1000	3.87	34.48	0.63	3.31	27.41	77.0	(1.363)

a) Alternate value, 2.21 μg at/L, not used in interpolation.
b) Alternate value, 1.76 ml/L, not used in interpolation.

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

PAOLINA-T; March 16, 1950; 0950 GCT; 33°24.5'N, 117°55.5'W; sounding, 340 fm; wind, 320°, force 4; weather, partly cloudy; sea, moderate; wire angle, 10°. 90.30

0	13.74	33.49	6.01	0.42	0	13.74	33.49	6.01	0.42	25.10	287.8	0.000
10	13.72	33.35	6.12	0.50	10	13.72	33.35	6.12	0.50	24.99	298.1	0.029
25	13.72	33.49	6.12	0.47	20	13.72	33.43	6.14	0.48	25.05	292.4	0.059
49	11.38	33.48	4.72	1.24	30	13.67	33.50	6.09	0.46	25.12	286.6	0.088
74	-	33.61	3.72	1.87	50	11.35	33.48	4.67	1.40	25.55	245.7	0.141
98	9.39	33.80	3.24	2.01	75	10.02	33.63	3.69	1.87	25.90	213.0	0.198
153	8.65	33.98	2.56	2.35	100	9.35	33.81	3.21	2.02	26.15	189.4	0.249
202	8.38	34.14	1.69	2.66	150	8.67	33.97	2.61	2.33	26.39	167.8	0.338
251	7.94	34.19	1.36	2.84	200	8.38	34.14	1.71	2.64	26.56	151.8	0.418
299	7.54	34.21	1.11	2.95	250	7.95	34.19	1.37	2.83	26.67	142.8	0.491
353	7.10	34.23	0.87	3.08	300	7.52	34.21	1.11	2.96	26.75	135.8	0.561
402	6.76	34.25	0.67	3.14	400	6.78	34.25	0.68	3.14	26.88	124.1	0.691
451	6.51	34.29	0.54	3.30	500	6.22	34.31	0.42	3.33	27.00	113.6	0.810
500	6.22	34.31	0.42	3.33	600	5.70	34.31	0.23	-	27.07	108.2	0.922
603	5.69	34.31	0.21	-								

PAOLINA-T; March 16, 1950; 1510 GCT; 33°11'N, 118°23.5'W; sounding, 640 fm; wind, 320°, force 3; weather, haze; sea, moderate; wire angle, 1°. 90.37

0	13.71	33.51	6.22	0.44	0	13.71	33.51	6.22	0.44	25.12	286.0	0.000
10	13.67	33.51	6.26	0.45	10	13.67	33.51	6.26	0.45	25.12	285.3	0.028
25	13.36	33.51	6.19	0.51	20	13.57	33.51	6.24	0.48	25.14	283.7	0.057
50	11.23	33.39	4.59	1.30	30	12.74	33.50	6.07	0.58	25.30	268.7	0.085
74	10.10	33.64	3.65	1.82	50	11.23	33.39	4.59	1.30	25.51	249.8	0.136
99	9.46	33.82	2.96	2.16	75	10.08	33.70	3.57	1.86	25.95	208.6	0.194
153	8.68	33.89	2.37	2.43	100	9.41	33.82	2.94	2.17	26.15	189.7	0.244
202	8.32	34.09	1.79	2.70	150	8.70	33.88	2.39	2.41	26.31	175.0	0.335
302	7.38	34.09	0.99	3.05	200	8.33	34.09	1.83	2.68	26.53	154.8	0.418
406	6.66	34.22	0.60	3.17	250	7.88	34.10	1.33	2.91	26.61	148.3	0.493
506	6.07	34.16	0.38	3.37	300	7.41	34.10	0.99	3.04	26.68	142.4	0.565
610	5.56	34.22	0.35	3.41	400	6.71	34.22	0.61	3.16	26.87	125.4	0.699
710	5.14	34.36	0.31	3.46	500	6.11	34.15	0.39	3.35	26.89	124.0	0.824
815	4.80	34.28	0.37	3.56	600	5.60	34.21	0.35	3.41	27.00	114.3	0.943
1014	4.22	34.26	0.45	3.56	700	5.20	34.36	0.31	3.46	27.17	99.1	1.050
					800	4.85	34.29	0.35	3.55	27.15	101.0	1.150
					1000	4.27	34.36	0.45	3.56	27.27	90.6	1.342

PAOLINA-T; March 16, 1950; 2105 GCT; 32°54.5'N, 118°56'W; sounding, 1,050 fm; wind, 300°, force 3; weather, partly cloudy; sea, moderate; wire angle, 13°. 90.45

0	13.40	33.48	6.10	0.66	0	13.40	33.48	6.10	0.66	25.16	282.2	0.000
10	13.10	33.37	6.19	0.66	10	13.10	33.37	6.19	0.66	25.13	284.7	0.028
25	13.06	33.46	6.21	0.64	20	13.08	33.39	6.21	0.65	25.15	283.1	0.057
54	10.78	33.46	4.45	1.52	30	13.01	33.47	6.16	0.63	25.23	276.2	0.085
78	10.04	33.62	3.43	2.00	50	11.00	33.46	4.80	1.24	25.60	241.1	0.136
107	9.35	33.84	2.76	2.30	75	10.10	33.56	3.50	1.94	25.83	219.3	0.194
160	8.60	34.11	1.99	2.65	100	9.49	33.79	2.90	2.24	26.11	193.0	0.246
214	8.10	34.16	1.52	2.82	150	8.70	34.09	2.10	2.60	26.48	159.5	0.333
321	7.08	34.23	0.90	3.32	200	8.22	34.15	1.62	2.77	26.59	148.9	0.411
434	6.49	34.22	0.57	3.40	250	7.73	34.19	1.27	2.99	26.70	139.6	0.483
542	5.84	34.33	0.44	3.61	300	7.25	34.23	1.00	3.25	26.80	130.5	0.550
651	5.30	34.38	0.35	3.65	400	6.56	34.22	0.64	3.40	26.89	123.4	0.677
863	4.50	34.42	0.44	3.75	500	6.05	34.27	0.46	3.51	26.99	114.3	0.796
1076	3.94	34.45	0.59	3.71	600	5.56	34.36	0.38	3.65	27.12	102.6	0.905
1280	3.78	34.51	0.67	3.76	700	5.06	34.39	0.35	3.67	27.21	95.0	1.004
					800	4.68	34.41	0.40	3.72	27.27	90.1	1.096
					1000	4.11	34.44	0.53	3.73	27.35	82.8	1.269

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	OBSERVED					INTERPOLATED					COMPUTED		
	Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
	m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
90.53	PAOLINA-T; March 17, 1950; 0252 GCT; 32°38.5'N, 119°29'W; sounding, 510 fm; wind, 320°, force 5; weather, cloudy; sea, very rough; wire angle, 25°.												
	0	12.93	33.48			0	12.93	33.48			25.25	273.1	0.000
	10	12.89	33.48			10	12.89	33.48			25.26	272.5	0.027
	23	12.75	33.48			20	12.83	33.48			25.27	271.9	0.054
	46	10.85	33.53			30	12.70	33.49			25.30	268.9	0.082
	68	9.82	33.69			50	10.67	33.55			25.72	229.0	0.131
	91	9.06	33.78			75	9.45	33.89			26.20	184.5	0.183
	142a)	8.68	33.93			100	(8.96)	(33.93)			(26.31)	(174.4)	(0.228)
	181a)	8.21	34.00										
	266a)	7.29	34.18										
	379a)	6.63	34.25										
	494a)	6.04	34.25										
	591a)	5.49	34.33										
	702a)	4.95	34.36										
90.90	CREST; March 7, 1950; 1538 GCT; 31°23'N, 122°07'W; sounding, 2,100 fm; wind, 360°, force 6; weather, cloudy; sea, high; wire angle, 25°.												
	0	14.56	33.35	5.76	0.39	0	14.56	33.35	5.76	0.39	24.82	314.4	0.000
	9	14.50	33.35	5.88	0.42	10	14.50	33.35	5.88	0.42	24.83	313.7	0.031
	28	14.54	33.35	5.73	0.43	20	14.52	33.35	5.79	0.43	24.82	314.3	0.063
	55	14.55	33.35	5.77	0.42	30	14.55	33.35	5.72	0.43	24.82	315.1	0.094
	83	14.51	33.36	5.68	0.43	50	14.55	33.35	5.77	0.42	24.82	315.6	0.157
	110	13.77	33.58	5.48	0.44	75	14.54	33.35	5.72	0.42	24.82	316.1	0.236
	166	11.04	33.57	5.11	0.98	100	14.41	33.42	5.56	0.43	24.90	309.0	0.314
	221	8.96	33.93	4.33	1.48	150	11.72	33.77	5.25	0.76	25.71	233.1	0.450
	331	7.34	34.09	1.87	2.34	200	9.63	33.89	4.69	1.29	26.17	189.7	0.556
	437	6.44	34.17	1.03	2.68	250	8.35	33.98	3.54	1.75	26.44	164.1	0.644
	548	5.24	34.19	0.75	2.86	300	7.68	34.05	2.40	2.16	26.60	150.0	0.722
	654	4.82	34.25	0.48	2.86	400	6.75	34.15	1.22	2.60	26.81	131.2	0.863
	871	4.32	34.45	0.42	2.97	500	5.64	34.19	0.87	2.82	26.98	115.1	0.986
	1078	3.70	34.51	0.71	2.96	600	4.98	34.21	0.60	2.86	27.08	106.6	1.097
	1285	3.28	34.54	0.98	2.94	700	4.69	34.29	0.45	2.88	27.17	97.9	1.199
						800	4.50	34.40	0.40	2.94	27.28	88.4	1.292
						1000	3.95	34.50	0.57	2.97	27.42	76.6	1.457
90.100	CREST; March 6, 1950; 0820 GCT; 31°05'N, 122°40'W; sounding, 2,125 fm; wind, 360°, force 5; weather, cloudy; sea, very rough; wire angle, 25°.												
	0	14.69	33.36	5.71	0.38	0	14.69	33.36	5.71	0.38	24.80	316.4	0.000
	9	14.65	33.38	5.73	0.40	10	14.66	33.38	5.73	0.40	24.82	314.6	0.032
	27	14.67	33.36	5.68	0.42	20	14.66	33.36	5.70	0.42	24.80	316.3	0.063
	55	14.61	33.36	5.64	0.41	30	14.67	33.36	5.67	0.42	24.80	316.7	0.095
	82	14.40	33.34	5.69	0.42	50	14.64	33.36	5.64	0.41	24.81	316.7	0.158
	109	14.10	33.33	5.58	0.44	75	14.48	33.35	5.68	0.41	24.83	314.9	0.237
	163	11.16	33.54	5.03	0.90	100	14.20	33.33	5.65	0.43	24.88	311.4	0.315
	217	9.05	33.82	4.15	1.45	150	12.52	33.43	5.18	0.64	25.29	272.7	0.461
	324	7.64	34.09	1.77	2.39	200	9.44	33.74	4.46	1.30	26.08	197.8	0.579
	427	6.68	34.18	0.84	2.66	250	8.52	33.94	3.45	1.80	26.38	169.8	0.671
	536	5.93	34.24	0.48	2.87	300	7.89	34.06	2.21	2.26	26.58	152.1	0.751
	640	5.30	34.30	0.38	2.92	400	6.91	34.16	0.99	2.60	26.79	132.6	0.894
	853	-	34.40	0.58	3.04	500	6.19	34.22	0.56	2.81	26.94	119.8	1.020
	1059	3.68	34.47	0.70	2.98	600	5.55	34.28	0.39	2.92	27.06	108.4	1.134
	1265	3.31	34.51	0.89	3.05	700	(4.96)	34.33	0.40	2.95	(27.17)	(98.3)	(1.237)
						800	(4.45)	34.38	0.54	3.02	(27.27)	89.3	(1.331)
						1000	(3.78)	34.45	0.66	2.98	(27.39)	78.2	(1.499)

a) Pretrip; depth too uncertain for interpolation.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
CREST; March 6, 1950; 0047 GCT; 30°46'N, 123°21'W; sounding, 1,950 fm; wind, 360°, force 4; weather, cloudy; sea, high; wire angle, 21°.													90.110
0	15.00	33.37	5.69	0.45	0	15.00	33.37	5.69	0.45	24.74	322.1	0.000	
9	14.88	33.37	5.73	0.45	10	14.88	33.37	5.73	0.45	24.76	319.9	0.032	
23	14.84	33.37	5.73	0.45	20	14.84	33.37	5.73	0.45	24.77	319.1	0.064	
46	14.88	33.41	5.69	0.44	30	14.85	33.38	5.71	0.45	24.78	318.9	0.096	
68	14.46	33.33	5.80	0.46	50	14.86	33.40	5.70	0.44	24.79	318.1	0.160	
91	14.50	33.36	5.69	0.46	75	14.47	33.33	5.79	0.46	24.82	314.2	0.239	
141	11.81	33.63	5.04	0.84	100	14.48	33.40	5.55	0.46	24.87	311.7	0.317	
187	9.86	33.73	4.66	1.29	150	11.30	33.65	4.98	0.92	25.69	234.5	0.453	
278	7.87	34.00	2.64	2.16	200	9.52	33.78	4.46	1.43	26.10	196.1	0.561	
374	6.50	34.00	2.09	2.47	250	8.44	33.98	3.13	1.94	26.43	165.5	0.652	
466	6.20	34.17	0.85	2.86	300	7.36	34.00	2.48	2.26	26.61	149.0	0.730	
562	5.75	34.24	0.53	2.94	400	6.38	34.02	1.74	2.55	26.75	135.8	0.872	
754	-	34.38	0.41	3.06	500	6.06	34.20	0.67	2.93	26.94	119.5	1.000	
946	4.17	34.45	0.53	3.10	600	(5.52)	34.27	0.48	2.95	(27.06)	(108.9)	(1.114)	
1149	3.54	34.51	0.82	3.13	700	(5.05)	34.35	0.42	3.04	(27.18)	(98.0)	(1.218)	
					800	(4.67)	34.40	0.42	3.08	(27.26)	(90.6)	(1.312)	
					1000	3.99	34.46	0.60	3.12	27.38	79.9	(1.482)	
CREST; March 5, 1950; 1703 GCT; 30°25'N, 124°01'W; sounding, 2,350 fm; wind, 360°, force 3; weather, partly cloudy; sea, very rough; wire angle, 15°.													90.120
0	15.21	33.39	5.57	0.43	0	15.21	33.39	5.57	0.43	24.71	324.7	0.000	
10	15.15	33.40	5.59	0.49	10	15.15	33.40	5.59	0.49	24.73	323.2	0.032	
23	15.18	33.39	5.59	0.45	20	15.17	33.39	5.59	0.46	24.72	324.6	0.065	
47	15.16	33.53	5.54	0.44	30	15.18	33.39	5.57	0.44	24.71	325.2	0.097	
70	14.78	33.40	5.55	0.39	50	15.12	33.53	5.53	0.44	24.83	314.2	0.161	
92	13.98	33.37	5.67	0.54	75	14.73	33.39	5.56	0.40	24.81	316.9	0.240	
141	11.06	33.40	4.89	1.06	100	13.46	33.37	5.64	0.64	25.06	293.6	0.316	
185	9.46	33.62	4.10	1.58	150	10.58	33.43	4.72	1.20	25.65	238.2	0.450	
275	8.24	33.95	2.88	2.02	200	9.18	33.69	3.86	1.67	26.09	197.3	0.559	
368	6.82	34.05	1.94	2.40	250	8.57	33.90	3.17	1.91	26.35	173.3	0.651	
457	5.86	34.11	1.03	2.75	300	7.90	33.98	2.62	2.12	26.51	158.3	0.733	
550	5.52	34.20	0.61	2.80	400	6.38	34.08	1.55	2.54	26.80	131.4	0.878	
734	4.73	34.36	0.34	3.02	500	5.68	34.15	0.80	2.78	26.94	118.6	1.004	
919	4.00	34.42	0.62	2.98	600	5.33	34.26	0.50	2.87	27.07	107.1	1.116	
1121	3.53	34.43	0.84	2.95	700	4.88	34.34	0.35	3.00	27.19	96.6	1.218	
					800	4.45	34.39	0.39	3.02	27.28	88.6	1.311	
					1000	3.74	34.42	0.76	2.96	27.37	80.0	1.479	
PAOLINA-T; March 18, 1950; 1335 GCT; 32°50'N, 117°31.5'W; sounding, 440 fm; wind, 320°, force 1; weather, overcast; sea, moderate; wire angle, 1°.													93.30
0	14.06	33.44	6.12	0.45	0	14.06	33.44	6.12	0.44	24.99	298.0	0.000	
10	13.95	33.44	6.19	0.47	10	13.95	33.44	6.19	0.47	25.01	296.0	0.030	
25	13.15	33.42	6.43	0.52	20	13.40	33.42	6.41	0.50	25.11	287.1	0.059	
50	12.00	33.49	5.35	0.88	30	12.87	33.42	6.41	0.55	25.22	277.2	0.087	
75	-	33.60	3.82	1.69	50	12.00	33.49	5.35	0.88	25.44	256.5	0.140	
100	9.25	33.70	3.54	1.84	75	10.10	33.60	3.82	1.69	25.86	216.4	0.200	
155	8.66	33.98	2.59	2.23	100	9.25	33.70	3.55	1.84	26.08	195.9	0.251	
205	8.30	34.13	1.85	2.46	150	8.70	33.95	2.68	2.20	26.36	169.9	0.342	
254	7.83	34.18	1.56	2.60	200	8.35	34.12	1.90	2.45	26.55	152.9	0.424	
304	7.28	34.19	1.11	2.77	250	7.88	34.18	1.60	2.59	26.67	142.4	0.497	
359	6.93	34.25	0.78	2.85	300	7.34	34.19	1.17	2.76	26.76	134.9	0.566	
409	6.66	34.29	0.61	2.90	400	6.72	34.28	0.65	2.89	26.91	121.1	0.694	
509	6.07	34.33	0.42	3.10	500	6.14	34.33	0.43	3.09	27.03	111.0	0.810	
614	5.46	34.34	0.38	3.16	600	5.55	34.34	0.37	3.16	27.11	104.0	0.918	
713	4.91	34.40	0.42	3.21	700	4.98	34.39	0.41	3.20	27.22	94.2	1.017	

SIO

CCOFI 5003

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
93.40	PAOLINA-T; March 18, 1950; 0645 GCT; 32°30'N, 118°12.5'W; sounding, 1,000 fm; wind, 030°, force 2; weather, overcast; sea, very rough; wire angle, 10°.											
0	13.84	33.43	5.98	0.55	0	13.84	33.43	5.98	0.55	25.03	294.5	0.000
10	13.80	33.44	6.05	0.52	10	13.80	33.44	6.05	0.52	25.04	293.2	0.029
23	13.80	33.44	6.05	0.54	20	13.80	33.44	6.06	0.54	25.04	293.4	0.059
47	13.30	33.42	6.00	0.56	30	13.77	33.43	6.05	0.55	25.04	293.9	0.088
71	-	33.44	5.25	1.08	50	13.23	33.42	5.97	0.56	25.14	284.4	0.146
94	10.02	33.58	4.12	1.67	75	12.40	33.45	5.05	1.24	25.33	267.5	0.215
146	8.90	33.93	2.89	2.08	100	9.70	33.65	3.92	1.75	25.97	206.6	0.274
192	8.60	34.07	2.36	2.34	150	8.86	33.95	2.85	2.10	26.34	172.2	0.369
285	7.52	34.20	1.24	2.82	200	8.52	34.09	2.27	2.38	26.50	157.8	0.451
384	6.82	34.25	0.71	3.03	250	7.90	34.16	1.67	2.64	26.65	144.2	0.527
478	6.22	34.30	0.46	3.23	300	7.41	34.21	1.12	2.88	26.76	134.3	0.596
578	5.74	34.34	0.34	3.31	400	6.70	34.26	0.65	3.05	26.90	122.2	0.724
776	4.85	34.42	0.37	3.41	500	6.11	34.31	0.42	3.27	27.02	112.2	0.842
972	4.01	34.48	0.59	3.38	600	5.63	34.35	0.33	3.32	27.11	104.4	0.950
1175	3.46	34.52	0.85	3.37	700	5.18	34.39	0.35	3.38	27.19	96.7	1.050
					800	4.75	34.43	0.39	3.41	27.28	89.5	1.143
					1000	3.93	34.49	0.62	3.38	27.41	77.0	1.311
93.50	PAOLINA-T; March 17, 1950; 2316 GCT; 32°10'N, 118°53.5'W; sounding, 800 fm; wind, 310°, force 5; weather, overcast; sea, very rough; wire angle, 45°.											
0	13.88	33.45	6.04	0.49	0	13.88	33.45	6.04	0.49	25.04	293.6	0.000
8	13.83	33.46	6.10	0.48	10	13.85	33.46	6.10	0.48	25.05	292.6	0.029
18	13.86	33.46	6.08	0.52	20	13.85	33.46	6.10	0.52	25.05	292.9	0.058
35	13.56	33.46	5.86	0.54	30	13.70	33.46	6.01	0.53	25.08	290.2	0.088
52	12.88	33.44	4.83	0.77	50	13.00	33.44	4.90	0.69	25.21	278.6	0.144
69	11.31	33.44	4.06	1.31	75	11.00	33.45	3.66	1.42	25.59	242.4	0.210
106	9.79	33.62	2.54	1.81	100	10.00	33.58	2.68	1.74	25.86	216.7	0.267
140	8.99	33.81	2.09	2.08	150	8.82	33.87	1.98	2.14	26.28	177.6	0.366
208	8.08	34.05	1.32	2.43	200	8.17	34.04	1.42	2.39	26.52	156.2	0.449
279	7.50	34.14	0.64	2.71	250	7.70	34.11	0.85	2.60	26.64	145.1	0.525
348	7.13	34.24	0.37	2.99	300	7.37	34.17	0.52	2.79	26.74	136.6	0.595
418	6.78	34.31	0.34	3.08	400	6.89	34.30	0.35	3.06	26.90	122.0	0.724
492	6.19	34.31	0.46	3.16	500	6.15	34.31	0.48	3.17	27.01	112.6	0.841
577	5.67	34.33	0.71	3.26	600	5.54	34.34	0.76	3.27	27.11	103.9	0.949
758	4.83	34.40	0.86	3.33	700	5.06	34.38	0.85	3.32	27.20	95.8	1.049
93.60	PAOLINA-T; March 17, 1950; 1530 GCT; 31°42'N, 119°15'W; sounding, 1,550 fm; wind, 300°, force 4; weather, overcast; sea, very rough; wire angle, 23°.											
0	13.51	33.37	5.95	0.52	0	13.51	33.37	5.95	0.52	25.05	292.5	0.000
9	13.48	33.35	6.15	0.56	10	13.48	33.35	6.15	0.56	25.04	293.4	0.029
28	13.48	33.25	6.10	0.56	20	13.48	33.29	6.15	0.57	24.99	298.1	0.059
55	11.76	33.22	6.04	0.84	30	13.47	33.25	6.09	0.55	24.96	301.2	0.089
82	10.52	33.49	5.64	1.43	50	12.29	33.22	6.04	0.70	25.18	281.4	0.147
109	9.53	33.62	4.70	1.80	75	10.77	33.37	5.80	1.28	25.57	244.4	0.213
162	8.51	33.95	3.76	2.17	100	9.85	33.58	4.95	1.72	25.89	214.2	0.270
214	7.87	34.05	3.18	2.59	150	8.67	33.89	3.93	2.08	26.32	173.8	0.367
318	7.00	34.13	2.20	2.83	200	8.04	34.04	3.33	2.54	26.54	154.3	0.449
419	6.30	34.25	1.47	3.16	250	7.52	34.07	2.82	2.68	26.63	145.6	0.524
524	5.63	34.31	0.84	3.35	300	7.12	34.11	2.37	2.78	26.72	137.7	0.595
626	5.33	34.35	0.53	3.41	400	6.43	34.23	1.60	3.11	26.91	120.9	0.724
841	4.45	34.43	0.42	3.60	500	5.76	34.30	0.96	3.34	27.05	108.4	0.839
1042	3.78	34.50	0.39	3.56	600	5.41	34.34	0.59	3.38	27.13	102.3	0.944
1245	3.45	34.52	0.39	3.51	700	5.08	34.38	0.43	3.51	27.20	96.1	1.043
					800	4.62	34.41	0.40	3.58	27.27	89.3	1.136
					1000	3.92	34.49	0.40	3.58	27.41	76.9	1.303

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

100.30

HORIZON; March 15, 1950; 0939 GCT; 31°41'N, 116°48.5'W; sounding, 310 fm; wind, 360°, force 2; weather, clear; sea, rough; wire angle, 8°.

0	13.74	33.50	5.19	0.43	0	13.74	33.50	5.19	0.43	25.10	287.2	0.000
11	13.45	33.49	5.20	0.48	10	13.50	33.49	5.19	0.48	25.14	283.6	0.028
24	11.10	33.43	4.69	1.12	20	11.50	33.44	4.99	0.77	25.49	250.6	0.055
48	10.25	33.61	3.28	1.53	30	10.81	33.43	4.35	1.18	25.61	239.6	0.080
73	9.86	33.70	3.03	1.62	50	10.22	33.62	3.26	1.54	25.86	216.2	0.125
97	9.61	33.85	2.58	1.82	75	9.86	33.71	3.03	1.63	25.99	204.3	0.178
151	8.99	34.02	2.15	2.07	100	9.57	33.86	2.55	1.84	26.16	189.0	0.227
199	8.57	34.14	1.61	2.25	150	8.99	34.02	2.18	2.05	26.37	169.1	0.316
248	8.20	34.20	1.27	2.46	200	8.55	34.14	1.61	2.25	26.54	154.5	0.398
297	7.78	34.23	1.00	2.51	250	8.18	34.20	1.26	2.47	26.64	145.5	0.472
351	7.38	34.25	0.76	2.58	300	7.74	34.23	0.97	2.51	26.73	137.6	0.544
401	6.98	34.23	0.66	2.69	400	6.99	34.23	0.64	2.68	26.84	128.6	0.676
450	6.50	34.29	0.51	2.74	500	6.25	34.31	0.39	2.84	27.00	113.9	0.797
500	6.25	34.31	0.39	2.84								

100.40

HORIZON; March 15, 1950; 0339 GCT; 31°23'N, 117°24'W; sounding, 1,000 fm; wind, 350°, force 4; weather, partly cloudy; sea, rough; wire angle, 32°.

0	14.36	33.48	5.48	0.43	0	14.36	33.48	5.48	0.43	24.96	300.9	0.000
9	14.40	33.48	5.42	0.49	10	14.40	33.48	5.42	0.48	24.95	302.1	0.030
22	14.14	33.46	5.38	0.45	20	14.15	33.46	5.40	0.45	24.99	298.8	0.060
42	12.94	33.46	5.55	0.52	30	14.02	33.46	5.44	0.48	25.01	296.5	0.090
63	11.70	33.42	4.60	0.97	50	12.45	33.44	5.53	0.60	25.31	268.4	0.146
83	10.56	33.49	4.06	1.37	75	11.25	33.44	4.24	1.20	25.54	247.4	0.211
124	9.36	33.91	2.59	1.98	100	9.80	33.67	3.47	1.65	25.97	207.0	0.268
160	8.97	34.05	2.18	2.17	150	9.05	34.04	2.29	2.12	26.38	168.5	0.362
231	8.08	34.07	1.51	2.48	200	8.41	34.06	1.81	2.32	26.50	150.2	0.441
306	7.64	34.23	1.04	2.70	250	7.95	34.10	1.38	2.55	26.60	149.8	0.516
377	7.04	34.31	0.73	2.82	300	7.69	34.21	1.08	2.68	26.72	138.3	0.588
452	6.54	34.31	0.44	2.94	400	6.87	34.31	0.62	2.85	26.91	121.1	0.718
608	5.62	34.36	0.45	3.00	500	6.22	34.32	0.45	2.98	27.01	113.0	0.835
774	4.78	34.31	0.40	3.07	600	5.66	34.36	0.44	3.02	27.11	104.0	0.943
964	4.18	34.47	0.56	3.04	700	5.14	34.33	0.41	3.05	27.15	100.6	1.045
					800	4.68	34.32	0.42	3.08	27.20	96.7	1.144
					1000	(4.10)	(34.48)	(0.59)	(3.03)	(27.39)	(79.8)	(1.322)

100.50

HORIZON; March 14, 1950; 2139 GCT; 31°04'N, 118°05'W; sounding, 1,000 fm; wind, 310°, force 3; weather, partly cloudy; sea, rough; wire angle, 20°.

0	14.20	33.48	5.08	0.48	0	14.20	33.48	5.08	0.48	24.99	297.8	0.000
9	14.08	33.48	5.51	0.48	10	14.08	33.48	5.51	0.48	25.02	295.8	0.030
23	13.99	33.48	5.40	0.46	20	14.00	33.48	5.43	0.46	25.03	294.4	0.059
47	12.65	33.44	5.20	0.68	30	13.90	33.47	5.31	0.50	25.05	293.3	0.089
71	10.92	33.51	3.98	1.37	50	12.15	33.44	5.14	0.75	25.37	262.9	0.144
94	10.22	33.64	3.50	1.61	75	10.81	33.53	3.89	1.43	25.69	233.4	0.206
146	9.38	33.86	2.74	1.95	100	10.09	33.67	3.41	1.65	25.92	211.5	0.262
192	8.86	34.07	2.15	2.32	150	9.32	33.88	2.69	1.98	26.21	184.6	0.361
283	8.04	34.22	1.22	2.64	200	8.77	34.09	2.09	2.38	26.46	161.4	0.447
380	7.14	34.27	0.70	2.92	250	8.34	34.18	1.55	2.56	26.60	149.1	0.525
472	6.42	34.31	0.43	2.96	300	7.87	34.23	1.10	2.68	26.71	139.5	0.597
570	5.72	34.33	0.32	3.09	400	6.97	34.28	0.64	2.94	26.88	124.7	0.729
762	4.90	34.38	0.38	3.08	500	6.19	34.32	0.39	2.99	27.01	112.4	0.848
954	4.26	34.45	0.59	3.09	600	5.56	34.33	0.34	3.09	27.10	104.8	0.956
1155	3.68	34.34u	0.68	3.04	700	5.12	34.36	0.36	3.09	27.18	98.0	1.058
					800	4.78	34.39	0.42	3.08	27.24	92.8	1.153
					1000	4.10	(34.45)	0.62	3.08	(27.36)	(81.9)	(1.328)

S10

CCOFI 5003

OBSERVED					INTERPOLATED					COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m

100.60 HORIZON; March 14, 1950; 1539 GCT; 30°45'N, 118°43'W; sounding, missing; wind, 340°, force 3; weather, partly cloudy; sea, moderate; wire angle, 6°.

0	13.62	33.32	5.71	0.49	0	13.62	33.32	5.71	0.49	24.98	298.6	0.000
10	13.66	33.32	5.94	0.50	10	13.66	33.32	5.94	0.50	24.98	299.0	0.030
24	13.63	33.32	5.68	0.49	20	13.65	33.32	5.70	0.49	24.98	299.2	0.060
49	-	33.30	5.75	0.56	30	13.58	33.32	5.69	0.49	25.00	298.1	0.090
73	11.70	33.42	5.11	0.87	50	12.40	33.30	5.73	0.57	25.21	278.0	0.147
98	10.02	33.58	3.75	1.55	75	11.65	33.44	5.05	0.96	25.46	254.4	0.214
151	8.95	33.81	3.27	1.85	100	9.98	33.60	3.72	1.56	25.88	214.9	0.273
200	8.31	33.89	2.57	2.19	150	8.98	33.81	3.27	1.84	26.21	184.6	0.372
297	7.21	34.10	1.41	2.69	200	8.31	33.89	2.57	2.19	26.38	169.2	0.461
400	6.36	34.09r	0.75	2.90	250	7.70	34.02	1.88	2.52	26.57	151.7	0.541
497	5.80	34.29	0.52	3.03	300	7.18	34.10	1.38	2.70	26.71	139.2	0.614
600	5.18	34.33	0.39	3.10	400	6.36	34.22	0.75	2.90	26.91	120.9	0.744
801	4.52	34.43	0.46	3.06	500	5.78	34.29	0.52	3.03	27.04	109.2	0.859
998	3.93	34.47	0.66	3.06	600	5.18	34.33	0.39	3.10	27.15	100.2	0.963
1202	3.40	34.54	0.86	3.03	700	4.80	34.37	0.42	3.08	27.22	93.4	1.060
					800	4.54	34.43	0.46	3.06	27.30	86.7	1.150
					1000	3.90	34.47	0.66	3.06	27.40	78.2	1.316

100.70 HORIZON; March 14, 1950; 0939 GCT; 30°24'N, 119°27'W; sounding, 2,050 fm; wind, 340°, force 2; weather, clear; sea, moderate; wire angle, 13°.

0	13.62	33.24	5.64	0.52	0	13.62	33.24	5.64	0.52	24.93	304.0	0.000
10	13.62	33.24	5.71	0.55	10	13.62	33.24	5.71	0.55	24.92	304.5	0.030
24	13.55	33.24	5.78	0.53	20	13.58	33.24	5.77	0.54	24.93	303.6	0.061
49	12.54	33.19	5.54	0.64	30	13.50	33.23	5.74	0.54	24.94	303.2	0.091
72	11.73	33.24	5.50	0.85	50	12.50	33.19	5.53	0.65	25.11	287.6	0.150
96	10.99	33.40	4.89	1.00	75	11.45	33.26	5.45	0.88	25.36	264.2	0.219
148	8.72	33.78	2.95	2.10	100	10.88	33.43	4.76	1.03	25.60	242.4	0.283
195	8.18	33.96	2.71	2.30	150	8.67	33.79	2.94	2.11	26.25	181.2	0.389
288	7.61	34.18	1.17	2.93	200	8.15	33.98	2.65	2.33	26.47	160.3	0.474
387	6.70	34.25	0.66	3.20	250	7.82	34.11	1.85	2.64	26.62	146.9	0.551
480	6.12	34.30	0.41	3.30	300	7.51	34.19	1.06	2.98	26.73	137.2	0.622
579	5.38	34.33	0.35	3.35	400	6.61	34.25	0.60	3.22	26.90	121.9	0.751
773	4.60	34.37	0.47	3.36	500	5.97	34.30	0.40	3.32	27.03	111.0	0.868
964	3.99	34.44	0.59	3.43	600	5.26	34.34	0.36	3.36	27.14	100.3	0.973
1164	3.50	34.51	0.80	3.23	700	4.82	34.36	0.42	3.36	27.21	94.4	1.071
					800	4.50	34.37	0.49	3.36	27.26	90.7	1.163
					1000	3.89	34.46	0.64	3.41	27.39	78.7	1.332

100.80 HORIZON; March 14, 1950; 0339 GCT; 30°04'N, 120°07.5'W; sounding, 1,900 fm; wind, 350°, force 2; weather, partly cloudy; sea, very rough; wire angle, 20°.

0	14.53	33.37	5.65	0.47	0	14.53	33.37	5.65	0.47	24.84	312.7	0.000
9	14.56	33.35	5.59	0.45	10	14.55	33.35	5.60	0.45	24.82	314.6	0.031
23	14.20	33.33	5.74	0.46	20	14.52	33.33	5.72	0.45	24.81	315.7	0.063
47	13.54	33.31	5.81	0.49	30	14.00	33.32	5.77	0.47	24.91	306.4	0.094
70	12.58	33.06r	5.74	0.60	50	13.42	33.31	5.81	0.50	25.02	286.1	0.153
94	12.24	33.28	5.57	0.65	75	12.50	33.29	5.72	0.61	25.19	280.9	0.224
145	11.78	33.30	5.05	1.13	100	12.19	33.28	5.52	0.68	25.24	276.4	0.294
193	9.34	33.63	3.91	1.69	150	11.68	33.31	4.97	1.19	25.36	266.2	0.430
286	8.28	34.18	1.45	2.56	200	9.21	33.79	3.70	1.77	26.16	190.5	0.544
385	7.04	34.18	1.61r	2.84	250	8.69	34.14	2.35	2.26	26.52	157.4	0.630
479	6.37	34.25	0.58	3.05	300	8.10	34.18	1.31	2.61	26.64	146.6	0.707
578	5.56	34.27	0.42	3.16	400	6.90	34.19	0.75	2.89	26.82	130.3	0.844
772	4.60	34.39	0.57	3.15	500	6.22	34.25	0.53	3.08	26.96	118.0	0.969
963	4.00	34.40	0.62	3.14	600	5.43	34.28	0.43	3.16	27.08	107.2	1.081
1164	3.46	34.51	0.86	3.11	700	4.90	34.36	0.52	3.15	27.20	95.4	1.182
					800	4.50	34.39	0.59	3.15	27.27	89.1	1.275
					1000	3.89	34.41	0.65	3.13	27.35	82.4	1.447

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

HORIZON; March 13, 1950; 2139 GCT; 29°44'N, 120°47'W; sounding, 2,100 fm; wind, 320°, force 2; weather, cloudy; sea, very rough; wire angle, 12°. 100.90

0	14.63	33.35	5.54	0.45	0	14.63	33.35	5.54	0.45	24.80	315.9	0.000	
10	14.46	33.35	5.33	0.44	10	14.46	33.35	5.33	0.44	24.84	312.8	0.031	
24	14.44	33.35	5.39	0.44	20	14.44	33.35	5.37	0.44	24.84	312.6	0.063	
49	14.45	33.31	5.34	0.42	30	14.43	33.34	5.40	0.44	24.84	313.4	0.094	
73	14.19	33.29	5.26	0.41	50	14.44	33.31	5.35	0.42	24.81	316.3	0.157	
97	13.60	33.24	5.37	0.48	75	14.14	33.28	5.27	0.42	24.85	313.0	0.236	
150	11.94	33.49	4.88	0.76	100	13.51	33.24	5.38	0.50	24.95	304.3	0.313	
198	9.18	33.73	3.40	1.76	150	11.94	33.49	4.88	0.76	25.45	257.7	0.453	
293	8.01	34.14	2.52	2.44	200	9.12	33.74	3.39	1.78	26.14	192.6	0.566	
394	7.25	34.23	0.92	2.78	250	8.43	33.99	2.98	2.18	26.44	164.5	0.655	
490	6.18	34.23	0.58	2.96	300	7.97	34.16	2.45	2.47	26.64	146.1	0.732	
591	5.49	34.32	0.37	3.08	400	7.17	34.23	0.89	2.79	26.81	130.9	0.871	
788	4.58	34.36	0.42	3.12	500	6.10	34.23	0.55	2.98	26.96	117.8	0.995	
983	3.98	34.47	0.58	3.08	600	5.42	34.32	0.40	3.08	27.11	103.8	1.106	
1186	3.46	34.51	0.80	3.00	700	4.93	34.35	0.40	3.10	27.19	96.5	1.206	
					800	4.55	34.36	0.45	3.12	27.24	92.1	1.301	
					1000	3.43	34.48	0.58	3.08	27.45	72.0	1.465	

HORIZON; March 13, 1950; 1601 GCT; 29°20.5'N, 121°27'W; sounding, 2,150 fm; wind, calm; weather, overcast; sea, very rough; wire angle, 0°. 100.100

0	15.02	33.51	5.46	0.44	0	15.02	33.51	5.46	0.44	24.84	312.1	0.000	
10	15.07	33.46	5.54	0.46	10	15.07	33.46	5.54	0.46	24.79	316.9	0.031	
25	15.11	33.52	5.50	0.39	20	15.09	33.48	5.52	0.38	24.80	316.4	0.063	
50	15.34	33.60	5.38	0.38	30	15.15	33.54	5.47	0.37	24.83	313.6	0.095	
75	15.28	33.64	5.30	0.38	50	15.34	33.60	5.38	0.38	24.84	313.8	0.157	
100	14.16	33.65	5.23	0.41	75	15.28	33.64	5.30	0.38	24.88	310.3	0.235	
154	11.31	33.57	4.62	1.00	100	14.16	33.65	5.23	0.41	25.13	286.9	0.310	
204	9.24	33.80	3.81	1.69	150	11.49	33.57	4.68	0.96	25.60	243.7	0.443	
302	8.16	34.11	2.08	2.41	200	9.34	33.78	3.89	1.59	26.13	193.2	0.552	
406	7.40	34.30	0.79	2.87	250	8.60	33.97	2.90	2.12	26.40	168.7	0.642	
504	6.40	34.31	0.52	3.01	300	8.17	34.11	2.12	2.41	26.57	152.9	0.722	
810	4.47	34.42	0.49	3.17	400	7.44	34.30	0.81	2.85	26.83	129.6	0.864	
1006	3.91	34.49	0.65	3.19	500	6.45	34.31	0.54	3.01	26.97	116.6	0.987	
1208	3.44	34.52	0.90	3.10	600	(5.59)	(34.33)	(0.50)	(3.06)	(27.10)	(105.2)	(1.098)	
					700	(4.94)	(34.37)	(0.50)	(3.11)	(27.21)	(95.1)	(1.198)	
					800	(4.50)	(34.42)	(0.50)	(3.16)	(27.30)	(87.0)	(1.289)	
					1000	3.92	34.49	0.65	3.19	27.41	77.0	(1.453)	

HORIZON; March 13, 1950; 0939 GCT; 29°01'N, 122°07'W; sounding, 2,450 fm; wind, 340°, force 4; weather, overcast; sea, very rough; wire angle, 10°. 100.110

0	16.04	33.78	5.29	0.43	0	16.04	33.78	5.29	0.43	24.82	314.3	0.000	
10	16.03	33.83	5.02	0.42	10	16.03	33.83	5.02	0.42	24.86	310.7	0.031	
25	15.98	33.81	5.13	0.44	20	15.99	33.81	5.07	0.42	24.86	311.4	0.062	
49	15.99	33.84	5.22	0.44	30	15.98	33.81	5.16	0.44	24.86	311.5	0.094	
74	16.00	33.81	5.21	0.41	50	15.98	33.84	5.22	0.44	24.88	309.8	0.156	
98	15.94	33.80	5.13	0.43	75	16.00	33.81	5.21	0.42	24.85	313.2	0.233	
151	12.28	33.68	4.64	0.88	100	15.94	33.80	5.12	0.43	24.86	313.2	0.312	
200	9.63	33.71	3.88	1.66	150	12.28	33.68	4.63	0.87	25.53	249.7	0.452	
296	7.86	34.02	2.70	2.32	200	9.63	33.71	3.88	1.66	26.03	203.1	0.566	
398	6.68	34.16	1.27	2.95	250	8.60	33.85	3.25	2.08	26.30	177.4	0.661	
495	5.86	34.23	0.69	3.23	300	7.79	34.03	2.64	2.34	26.57	153.1	0.743	
597	5.37	34.32	0.39	3.33	400	6.65	34.16	1.27	2.96	26.83	129.1	0.884	
795	4.56	34.43	0.51	3.25u	500	5.82	34.23	0.66	3.24	26.99	114.4	1.006	
990	4.00	34.52	0.66	3.45	600	5.35	34.32	0.40	(3.32)	27.12	102.9	1.115	
1191	3.51	34.52	0.85	3.42	700	4.90	34.38	0.45	(3.36)	27.22	93.9	1.213	
					800	4.55	34.43	0.52	(3.39)	27.30	86.9	1.303	
					1000	3.98	34.52	0.66	3.45	27.43	75.4	1.466	

SIO

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OBSERVED					INTERPOLATED					COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m

100.120 HORIZON; March 13, 1950; 0339 GCT; 28°40'N, 122°45'W; sounding, 2,400 fm; wind, 350°, force 2; weather, overcast; sea, very rough; wire angle, 17°.

0	16.15	33.78	5.00	0.37	0	16.15	33.78	5.00	0.37	24.80	316.1	0.000
10	16.18	33.71	5.27	0.39	10	16.18	33.71	5.27	0.39	24.74	322.1	0.032
24	16.05	33.77	5.17	0.39	20	16.07	33.78	5.20	0.39	24.81	315.2	0.064
48	16.09	33.77	5.33	0.37	30	16.05	33.78	5.19	0.39	24.82	315.2	0.095
71	16.11	33.75	5.21	0.33	50	16.10	33.78	5.34	0.37	24.81	316.8	0.159
95	14.66	33.62	5.45	0.37	75	16.09	33.72	5.23	0.33	24.76	321.8	0.238
146	12.29	33.68	4.82	0.72	100	14.27	33.62	5.42	0.39	25.08	291.6	0.315
193	9.72	33.68	4.14	1.36	150	12.09	33.68	4.80	0.75	25.57	246.3	0.450
287	7.93	33.98	3.20	1.98	200	9.47	33.68	4.05	1.43	26.03	202.6	0.562
386	6.87	34.05	1.63	2.61	250	8.45	33.87	3.52	1.79	26.34	173.8	0.656
481	6.15	34.14	0.91	2.91	300	7.75	33.99	3.07	2.07	26.54	155.4	0.738
580	5.60	34.25	0.51	3.07	400	6.75	34.02	1.47	2.66	26.70	140.9	0.886
776	4.74	34.49	0.63u	3.00u	500	6.04	34.16	0.82	2.95	26.91	122.2	1.018
970	4.06	34.46	0.61	3.10	600	5.50	34.27	(0.51)	(3.07)	27.06	108.6	1.133
1173	3.50	34.49	0.86	3.10	700	5.05	34.42	(0.54)	(3.08)	27.23	92.7	1.234
					800	4.62	34.49	(0.56)	(3.08)	27.34	83.5	1.322
					1000	3.98	34.46	0.63	3.10	27.38	79.8	1.485

105.35 HORIZON; March 2, 1950; 0911, 0948, 1010 GCT; 30°39'N, 116°33'W; sounding, 670 fm; wind, 320°, force 3; weather, clear; sea, moderate; wire angle, 7°, 10°, 15°.

0	14.58	33.55	5.67	0.60	0	14.58	33.55	5.67	0.60	24.97	300.1	0.000
10	14.62	33.55	5.80	0.58	10	14.62	33.55	5.80	0.58	24.96	301.1	0.030
25	-	33.50	5.89	0.57	20	14.30	33.52	5.86	0.57	25.00	297.5	0.060
49	11.86	33.33	5.30	1.07	30	13.32	33.46	5.87	0.60	25.16	282.7	0.089
74	10.58	33.50	4.20	1.70	50	11.74	33.33	5.30	1.07	25.36	263.6	0.144
99	9.82	33.69	3.38	2.09	75	10.52	33.56	4.17	1.72	25.76	226.3	0.205
153	8.96	33.93	2.96	2.35	100	9.75	33.70	3.38	2.09	26.00	203.8	0.259
201	8.20	34.05	2.36	2.54	150	9.01	33.92	2.96	2.34	26.29	176.8	0.354
297	7.10	34.13	1.48	3.08	200	8.23	34.05	2.38	2.52	26.52	156.3	0.437
					250	7.52	34.10	1.88	2.86	26.66	143.1	0.512
397	6.48	34.22	0.80	3.36	300	7.06	34.13	1.45	3.10	26.75	135.4	0.581
495	6.04	34.31	0.40	3.56	400	6.47	34.22	0.79	3.36	26.90	122.1	0.710
599	5.60	34.37	0.44	3.74a)	500	6.00	34.31	0.40	3.57	27.03	110.7	0.826
697	5.21	34.37	0.38	3.72	600	5.59	34.37	0.44	3.74	27.13	102.3	0.933
801	4.75	34.44	0.40	3.72	700	5.18	34.37	0.38	3.72	27.18	98.1	1.033
					800	4.75	34.44	0.40	3.72	27.28	88.7	1.127
1007	4.01	34.48	0.64	3.45	1000	4.02	34.48	0.64	3.46	27.39	78.8	1.295

110.35 HORIZON; March 10, 1950; 0252 GCT; 29°46.5'N, 116°00'W; sounding, 650 fm; wind, 320°, force 3; weather, cloudy; sea, very rough; wire angle, 27°.

0	15.15	33.51	5.27	0.49	0	15.15	33.51	5.27	0.49	24.81	314.9	0.000
9	15.16	33.53	5.20	0.52	10	15.14	33.53	5.17	0.52	24.83	313.5	0.035
22	14.72	33.51	4.98	0.52	20	14.73	33.52	4.99	0.52	24.91	306.1	0.062
45	14.53	33.48	5.32	0.52	30	14.65	33.49	5.05	0.52	24.90	306.9	0.093
66	14.00	33.48	5.02	0.55	50	14.38	33.48	5.28	0.52	24.95	302.7	0.154
88	11.70	33.51	4.55	1.12	75	13.00	33.49	4.88	0.65	25.24	275.6	0.226
136	9.36	33.75	3.24	1.84	100	10.65	33.55	4.33	1.37	25.73	229.9	0.290
178	9.02	34.07	2.30	2.32	150	9.19	33.85	2.80	2.00	26.21	184.7	0.393
260	8.80	34.23	1.33	2.69	200	8.96	34.13	1.99	2.44	26.46	161.4	0.479
346	7.52	34.29	0.96	2.91	250	8.85	34.22	1.38	2.66	26.55	154.1	0.559
431	6.86	34.33	0.45	3.17	300	8.13	34.27	1.13	2.79	26.70	140.5	0.632
523	6.34	34.36	0.40	3.18	400	7.06	34.31	0.63	3.10	26.89	123.6	0.764
610	5.81	34.33	0.38	3.10u	500	6.46	34.36	0.40	3.19	27.01	113.0	0.882
794	4.97	34.38	0.35	3.27	600	5.86	34.33	0.39	3.21	27.06	108.7	0.993
983	4.20	34.42	0.55	3.08	700	5.34	34.34	0.37	3.24	27.13	102.4	1.099
					800	4.94	34.38	0.35	3.27	27.22	95.5	1.198
					1000	(4.13)	(34.42)	(0.60)	(3.06)	(27.33)	(84.7)	(1.378)

a) Alternate value, 3.55 μg at/L, not used in interpolation.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

HORIZON; March 10, 1950; 0628, 0642, 0656 GCT; 29°36.5'N, 116°19'W; sounding, 1,200 fm; wind, 320°, force 2; weather, partly cloudy; sea, rough; wire angle, 13°, 19°, 19°. 110.40

0	15.46	33.61	5.36	0.47	0	15.46	33.61	5.36	0.47	24.82	313.9	0.000
10	15.49	33.57	5.49	0.48	10	15.49	33.57	5.49	0.48	24.78	317.9	0.032
24	15.30	33.57	5.10	0.47	20	15.32	33.57	5.14	0.47	24.82	314.6	0.063
49	15.19	33.55	5.21	0.47	30	15.24	33.57	5.11	0.46	24.84	313.3	0.095
73	13.99	33.34	5.37	0.51	50	15.17	33.54	5.25	0.47	24.83	314.6	0.157
98	12.82	33.48	4.79	0.84	75	13.95	33.34	5.36	0.53	24.94	305.0	0.235
143	9.96	33.60	3.70	1.62	100	12.59	33.49	4.74	0.87	25.32	268.6	0.306
					150	9.72	33.63	3.56	1.71	25.95	209.3	0.426
191	9.04	33.80	2.90	2.06	200	8.92	33.83	2.74	2.11	26.24	182.9	0.524
					250	8.42	34.05	1.91	2.40	26.49	159.9	0.610
284	8.17	34.14	1.40	2.63	300	8.03	34.17	1.19	2.70	26.64	146.2	0.687
383	7.30	34.23	0.75	2.92	400	7.12	34.23	0.70	2.95	26.82	130.3	0.824
477	6.26	34.23	0.56	3.07	500	6.10	34.24	0.50	3.13	26.96	117.1	0.948
576	5.66	34.27	0.39	3.20	600	5.55	34.28	0.40	3.20	27.06	108.4	1.062
771	4.91	34.38	0.44	3.18	700	5.17	34.35	0.42	3.19	27.16	99.4	1.165
963	4.13	34.36	0.54	3.16	800	4.79	34.38	0.45	3.17	27.23	93.6	1.261
1165	3.62	34.49	0.76	3.03	1000	4.02	34.37	0.59	3.15	27.31	86.9	1.442

HORIZON; March 10, 1950; 1255 GCT; 29°15'N, 116°59'W; sounding, 2,050 fm; wind, 320°, force 3; weather, overcast; sea, rough; wire angle, 23°. 110.50

0	15.61	33.66	5.14	0.43	0	15.61	33.66	5.14	0.43	24.83	313.4	0.000
10	15.64	33.53	5.29	0.43	10	15.64	33.53	5.29	0.43	24.72	323.8	0.032
23	15.62	33.64	5.39	0.45	20	15.62	33.63	5.37	0.44	24.80	316.6	0.064
51	15.50	33.64	5.49	0.43	30	15.58	33.64	5.44	0.45	24.82	315.2	0.096
74	15.48	33.65	5.45	0.43	50	15.50	33.64	5.48	0.43	24.84	314.0	0.158
101	14.38	33.37	5.56	0.51	75	15.47	33.65	5.46	0.43	24.85	313.3	0.237
151	11.14	33.44	4.18	1.37	100	14.39	33.37	5.56	0.51	24.87	312.2	0.315
199	9.98	33.78	2.65	2.20	150	11.17	33.44	4.21	1.36	25.55	247.8	0.455
297	9.16	34.05	1.38	2.74	200	9.96	33.79	2.63	2.22	26.04	202.4	0.568
399	7.56	34.05	0.97	3.03	250	9.57	33.98	1.80	2.53	26.25	182.9	0.664
498	6.52	34.05	0.57	3.20	300	9.14	34.05	1.35	2.76	26.37	172.0	0.752
597	6.01	34.32	0.36	3.29	400	7.54	34.05	0.94	3.03	26.62	149.5	0.913
793	4.90	34.38	0.34	3.23u	500	6.50	34.05	0.57	3.20	26.76	136.6	1.057
993	4.16	34.11r	0.54	3.33	600	5.99	34.32	0.37	(3.29)	27.04	111.1	1.181
1194	3.60	34.42	0.84	3.22a)	700	5.42	34.38	0.35	(3.30)	27.16	100.6	1.286
					800	4.88	34.38	0.35	(3.30)	27.22	94.7	1.384
					1000	4.13	34.40	0.56	3.33	27.32	86.0	1.565

HORIZON; March 10, 1950; 1759 GCT; 28°53'N, 117°39'W; sounding, 2,050 fm; wind, 270°, force 3; weather, partly cloudy; sea, rough; wire angle, 6°. 110.60

0	15.70	33.67	5.37	0.42	0	15.70	33.67	5.37	0.42	24.81	314.7	0.000
10	15.68	33.73	5.56	0.42	10	15.68	33.73	5.56	0.42	24.87	310.1	0.031
25	15.65	33.75	5.55	0.41	20	15.65	33.75	5.59	0.41	24.89	307.3	0.062
49	15.49	33.69	5.53	0.38	30	15.62	33.74	5.53	0.40	24.89	308.6	0.093
74	13.22	33.55	5.06	0.73	50	15.49	33.68	5.53	0.38	24.87	310.8	0.155
98	11.56	33.58	4.12	1.30	75	13.12	33.55	5.02	0.74	25.27	273.5	0.228
152	10.82	33.85	2.75	–	100	11.53	33.58	4.05	1.32	25.60	242.5	0.292
200	10.23	34.25	1.38	2.57	150	10.83	33.84	2.80	2.10	25.92	212.5	0.406
297	8.96	34.38	0.64	2.95	200	10.23	34.25	1.38	2.57	26.35	172.9	0.502
400	8.08	34.40	0.49	3.09	250	9.50	34.34	0.91	2.80	26.54	155.4	0.584
498	6.68	34.36	0.36	3.27	300	8.93	34.38	0.63	2.95	26.66	144.4	0.660
600	5.79	34.34	0.30	3.29	400	8.08	34.40	0.49	3.09	26.81	131.7	0.798
802	4.84	34.37	0.40	3.31	500	6.65	34.36	0.37	3.27	26.98	115.6	0.921
1000	4.14	34.37	0.56	3.34	600	5.79	34.34	0.30	3.29	27.08	107.1	1.033
1204	3.57	34.51	0.76	3.31	700	5.24	34.35	0.35	3.30	27.15	100.5	1.136
					800	4.85	34.37	0.40	3.31	27.22	95.1	1.234
					1000	4.14	34.37	0.56	3.34	27.29	88.3	1.418

a) Mean value of 3.14 and 3.31 μg at/L.

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

110.70 HORIZON; March 10, 1950; 2203 GCT; 28°39'N, 118°18'W; sounding, 1,260 fm; wind, 020°, force 4; weather, cloudy; sea, very rough; wire angle, 15°.

0	15.71	33.68	5.48	0.45	0	15.71	33.68	5.48	0.45	24.82	313.9	0.000
10	15.53	33.67	5.25	0.48	10	15.53	33.67	5.25	0.48	24.85	311.2	0.031
24	15.35	33.67	5.43	0.48	20	15.37	33.67	5.40	0.48	24.89	308.3	0.062
53	13.55	33.57	5.14	0.63	30	15.25	33.66	5.40	0.50	24.91	306.8	0.093
76	11.91	33.55	4.22	1.11	50	13.95	33.58	5.16	0.61	25.12	286.8	0.152
105	10.50	33.67	3.52	1.53	75	12.00	33.54	4.26	1.08	25.48	283.3	0.224
157	10.00	33.86	2.50	2.00	100	10.55	33.64	3.58	1.48	25.82	220.4	0.286
209	9.35	34.16	1.50	2.38	150	10.08	33.84	2.66	1.97	26.05	199.8	0.392
313	7.43	34.13	1.44	2.60	200	9.48	34.15	1.61	2.34	26.40	168.0	0.483
423	6.88	34.26	0.65	2.89	250	8.36	34.16	1.45	2.49	26.58	150.9	0.564
527	5.94	34.31	0.45	3.04	300	7.53	34.13	1.44	2.58	26.68	142.0	0.637
632	5.14	34.33	0.40	3.10	400	7.02	34.23	0.83	2.82	26.83	129.0	0.772
836	4.44	34.41	0.48	2.98	500	6.18	34.30	0.44	3.01	27.00	113.7	0.894
1043	3.84	34.49	0.69	2.96	600	5.32	34.32	0.41	3.09	27.12	102.6	1.002
1246	3.26	34.54	0.94	2.96	700	4.86	34.35	0.42	3.07	27.20	95.6	1.101
					800	4.54	34.39	0.45	3.00	27.27	89.7	1.193
					1000	3.98	34.47	0.65	2.97	27.39	79.0	1.362

110.80 HORIZON; March 11, 1950; 1911 GCT; 28°13.5'N, 118°57.5'W; sounding, 2,200 fm; wind, 340°, force 5; weather, cloudy; sea, very rough; wire angle, 31°.

0	16.05	33.80	5.14	0.43	0	16.05	33.80	5.14	0.43	24.83	312.8	0.000
9	16.08	33.78	5.39	0.45	10	16.07	33.78	5.36	0.45	24.81	315.0	0.031
22	16.04	33.78	5.22	0.48	20	16.04	33.78	5.27	0.47	24.82	314.7	0.063
46	16.03	33.80	5.27	0.44	30	16.03	33.79	5.23	0.48	24.83	313.8	0.094
66	16.06	33.77	5.22	0.44	50	16.05	33.79	5.28	0.43	24.83	315.0	0.157
90	15.14	33.71	5.41	0.47	75	16.06	33.75	5.26	0.44	24.79	318.9	0.236
134	12.46	33.57	4.75	0.91	100	14.44	33.67	5.40	0.42	25.09	291.3	0.312
174	10.26	33.75	3.15	1.92	150	11.23	33.60	4.25	1.31	25.66	237.0	0.444
253	8.66	34.14	1.92	2.61	200	9.54	33.90	2.56	2.21	26.19	187.5	0.551
336	8.04	34.29	0.97	2.93	250	8.71	34.13	1.95	2.59	26.50	158.5	0.637
417	7.18	34.29	0.55	3.13	300	8.31	34.26	1.30	2.80	26.67	143.8	0.712
498	6.62	34.36	0.39	3.23	400	7.35	34.29	0.62	3.09	26.83	129.1	0.849
661	5.40	34.36	0.57u	3.08u	500	6.59	34.36	0.40	3.23	26.99	114.8	0.971
833	4.51	34.43	0.48	3.33	600	5.81	34.36	(0.42)	(3.26)	27.09	105.9	1.081
1013	3.96	34.45	0.68	3.21	700	5.16	34.37	(0.45)	(3.29)	27.18	97.8	1.183
					800	4.65	34.42	0.47	3.32	27.28	88.9	1.276
					1000	3.98	34.45	0.66	3.22	27.37	80.6	1.147

110.90 HORIZON; March 12, 1950; 0041 GCT; 27°56.5'N, 119°36'W; sounding, 2,350 fm; wind, 320°, force 4; weather, cloudy; sea, very rough; wire angle, 31°.

0	16.04	33.77	5.20	0.39	0	16.04	33.77	5.20	0.39	24.81	315.1	0.000
9	16.09	33.77	5.27	0.36	10	16.07	33.77	5.26	0.36	24.81	315.7	0.032
22	16.07	33.77	5.23	0.35	20	16.07	33.77	5.23	0.35	24.81	316.0	0.063
47	16.05	33.78	5.00	0.36	30	16.05	33.77	5.15	0.35	24.81	315.7	0.095
68	16.06	33.78	5.10	0.36	50	16.05	33.78	5.02	0.36	24.82	315.7	0.158
92	16.03	33.82	5.16	0.37	75	16.05	33.79	5.14	0.37	24.83	315.8	0.237
136	13.32	33.62	5.04	0.61	100	15.85	33.82	5.14	0.39	24.89	309.8	0.315
180	10.58	33.69	3.62	1.54	150	11.62	33.62	4.81	0.85	25.61	242.3	0.453
266	9.13	34.16	1.92	2.36	200	10.15	33.79	3.06	1.82	26.01	205.4	0.565
367	8.16	34.26	1.15	2.69	250	9.35	34.12	2.11	2.26	26.39	169.3	0.659
445	7.33	34.27	0.69	2.91	300	8.79	34.21	1.61	2.49	26.55	155.7	0.740
533	6.64	34.29	0.48	3.03	400	7.79	34.27	0.91	2.78	26.75	136.9	0.886
709	5.37	34.31	0.52	2.98u	500	6.89	34.28	0.54	3.01	26.89	124.8	1.017
892	4.52	34.45	0.52	3.10	600	6.12	34.30	0.49	(3.04)	27.01	114.4	1.137
1186	3.92	34.47	0.66	3.00	700	5.42	34.31	0.50	(3.06)	27.10	105.8	1.247
					800	4.88	34.38	0.52	(3.08)	27.22	94.7	1.347
					1000	4.23	34.46	0.57	3.08	27.36	82.9	1.525

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

110.100

HORIZON; March 12, 1950; 0618 GCT; 27°36.5'N, 120°15'W; sounding, 2,300 fm; wind, 340°, force 5; weather, overcast; sea, very rough; wire angle, 16°.

0	16.02	33.78	5.22	0.36	0	16.02	33.78	5.22	0.36	24.83	313.5	0.000
9	16.07	33.78	5.34	0.36	10	16.08	33.78	5.34	0.36	24.81	315.3	0.031
24	16.05	33.78	5.38	0.36	20	16.06	33.78	5.37	0.36	24.81	315.1	0.063
53	16.06	33.78	5.36	0.37	30	16.05	33.78	5.37	0.36	24.82	315.2	0.094
77	15.85	33.71	5.33	0.38	50	16.08	33.78	5.36	0.37	24.81	316.4	0.158
92p	15.60	33.90	5.11	0.43	75	15.89	33.71	5.33	0.38	24.80	318.0	0.237
106	13.76	33.64	5.08	0.48	100	14.55	33.76	5.10	0.46	25.13	287.1	0.313
158	12.52	33.77	5.37	0.37	150	12.70	33.74	5.35	0.38	25.50	253.3	0.448
222p	10.62	34.19	1.58	-	200	11.10	34.07	2.85	(1.16)	26.05	201.2	0.562
333p	9.08	-	-	-	250	10.18	(34.24)	(1.37)	(1.78)	(26.35)	(173.9)	(0.655)
472p	7.49	34.34	0.56	2.88	300	9.48	(34.28)	(1.11)	(2.20)	(26.50)	(160.5)	(0.738)
587p	6.24	34.34	0.39	2.93	400	8.29	(34.32)	(0.77)	(2.71)	(26.72)	(140.8)	(0.889)
805p	4.72	34.38	0.51	2.97	500	7.16	34.34	0.47	2.90	26.90	124.0	(1.022)
1019p	3.98	34.47	0.63	3.05	600	(6.13)	(34.34)	(0.39)	(2.94)	(27.04)	(111.6)	(1.140)
1221p	3.60	34.49	0.76	2.95	700	(5.35)	(34.35)	(0.45)	(2.95)	(27.14)	(101.8)	(1.246)
					800	(4.74)	(34.38)	(0.51)	(2.97)	(27.24)	(93.0)	(1.344)
					1000	4.03	34.46	0.61	3.04	27.38	80.4	(1.517)

110.110

HORIZON; March 12, 1950; 1148, 1203 GCT; 27°16.5'N, 120°55'W; sounding, 2,200 fm; wind, 020°, force 5; weather, overcast; sea, very rough; wire angle, 20°, 20°.

0	16.14	33.78	5.45	0.43	0	16.14	33.78	5.45	0.43	24.80	316.1	0.000
9	16.21	33.80	5.37	0.43	10	16.20	33.80	5.38	0.43	24.80	316.2	0.032
23	16.20	33.77	5.38	0.41	20	16.20	33.77	5.38	0.42	24.78	318.7	0.063
					30	16.20	33.77	5.38	0.40	24.78	319.1	0.095
46	16.19	33.78	5.36	0.40	50	16.20	33.80	5.39	0.40	24.80	317.3	0.159
68	15.80	33.89	5.55	0.39	75	15.50	33.83	5.54	0.40	24.98	300.7	0.236
90	15.06	33.63	5.42	0.45	100	14.90	33.62	5.36	0.47	24.95	304.4	0.312
139	14.18	33.64	5.19	0.51	150	13.88	33.69	5.00	0.66	25.22	279.7	0.457
183	11.52	33.91	3.53	1.70	200	10.15	33.94	3.30	1.89	26.12	194.5	0.577
271	8.36	34.03	2.65	2.32	250	8.72	34.00	2.84	2.20	26.40	168.2	0.667
365	7.32	34.14	1.39	2.87	300	7.99	34.06	2.29	2.52	26.56	153.7	0.747
454	6.34	34.23	0.80	3.13	400	6.92	34.18	1.07	2.97	26.81	131.3	0.890
548	5.66	34.36	0.49	3.33	500	5.96	34.27	0.65	3.24	27.00	113.1	1.012
734	4.94	34.36	0.57	3.26u	600	5.41	34.33	0.50	(3.35)	27.12	103.0	1.120
921	4.24	34.47	0.60	3.38	700	5.04	34.36	0.54	(3.36)	27.19	97.1	1.220
1120	3.74	34.49	0.80	3.27	800	4.70	34.39	0.58	(3.38)	27.25	91.8	1.314
					1000	3.98	34.48	0.66	3.35	27.40	78.3	1.484

113.35

HORIZON; March 9, 1950; 2212 GCT; 29°12'N, 115°39'W; sounding, 740 fm; wind, variable, force 1; weather, partly cloudy; sea, moderate; wire angle 13°.

0	13.58	33.53	5.62	0.77	0	13.58	33.53	5.62	0.77	25.16	281.6	0.000
10	12.36r	33.49	5.22	0.99	10	12.85	33.49	5.22	0.99	25.27	271.2	0.028
24	12.02	33.42	4.46	1.07	20	12.07	33.42	4.59	1.06	25.37	262.3	0.055
48	10.80	33.53	3.88	1.46	30	11.94	33.43	4.27	1.16	25.40	259.4	0.081
72	9.65	33.69	3.21	1.77	50	10.45	33.54	3.85	1.50	25.76	226.1	0.130
96	9.31	33.82	2.93	1.96	75	9.57	33.71	3.20	1.80	26.04	199.6	0.183
149	8.84	34.07	2.32	2.16	100	9.25	33.84	2.89	1.98	26.19	185.7	0.231
196	8.56	34.18	1.83	2.54	150	8.84	34.08	2.30	2.17	26.45	162.2	0.318
290	7.50	34.14	1.32	2.75	200	8.50	34.18	1.81	2.56	26.58	150.7	0.397
388	7.14	34.36	0.58	3.08	250	8.00	34.16	1.46	2.68	26.64	145.6	0.470
482	6.56	34.36	0.42	3.21	300	7.44	34.15	1.22	2.77	26.71	139.1	0.542
581	5.80	34.37	0.28	3.33	400	7.07	34.36	0.53	3.12	26.93	119.9	0.671
776	4.95	34.33	0.35	3.26u	500	6.43	34.36	0.39	3.23	27.01	112.7	0.788
968	4.13	34.29	0.56	3.36	600	5.70	34.37	0.28	(3.34)	27.11	103.8	0.896
1169	3.56	34.29	0.75	3.23	700	5.27	34.35	0.31	(3.34)	27.15	100.7	0.998
					800	4.84	34.32	0.38	(3.35)	27.18	98.7	1.098
					1000	4.02	34.29	0.60	3.36	27.24	92.8	1.290

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

117.35 HORIZON; March 9, 1950; 1700 GCT; 28°37'N, 115°16'W; sounding, 100 fm; wind, 350°, force 2; weather, cloudy; sea, moderate; wire angle, 0°.

0	14.96	33.62	5.54	0.68	0	14.96	33.62	5.54	0.68	24.94	303.0	0.000
10	14.57	33.57	5.45	0.67	10	14.57	33.57	5.45	0.67	24.98	298.9	0.030
25	14.08	33.60	5.19	0.69	20	14.23	33.59	5.27	0.68	25.07	291.0	0.060
49	13.06	33.49	4.93	1.03	30	13.92	33.59	5.09	0.74	25.13	285.0	0.088
74	11.02	33.58	3.88	1.47	50	13.00	33.49	4.90	1.05	25.24	275.0	0.144
99	9.68	33.75	3.12	1.94	75	10.90	33.58	3.87	1.50	25.71	231.2	0.208
153	9.24a)	34.22	1.60	2.49	100	9.66	33.76	3.09	1.96	26.06	197.8	0.261
					150	9.25	34.21	1.72	2.47	26.48	159.2	0.351

120.45 HORIZON; March 8, 1950; 27°40'N, 115°32'W; sounding, 1,250 fm; wind, 300°, force 2; weather, cloudy; sea, moderate; wire angle, 22°.

0	13.79	33.62	5.25	0.95	0	13.79	33.62	5.25	0.95	25.18	279.5	0.000
10	13.72	33.62	5.11	0.99	10	13.72	33.62	5.11	0.99	25.20	278.6	0.028
24	13.54	33.68	5.08	1.05	20	13.62	33.68	5.10	1.04	25.27	272.1	0.055
47	11.65	33.68	3.94	1.52	30	12.95	33.68	4.95	1.11	25.40	259.5	0.082
70	10.64	33.75	3.17	1.84	50	11.55	33.68	3.84	1.54	25.67	234.4	0.131
92	9.82	33.89	2.93	2.03	75	10.40	33.79	3.10	1.90	25.96	207.2	0.187
142	9.34	34.09	2.29	2.27	100	9.75	33.92	2.85	2.07	26.17	187.7	0.236
187	8.99	34.27	1.64	2.67	150	9.25	34.12	2.20	2.33	26.41	165.8	0.324
278	9.02	34.48	0.50	3.08	200	9.00	34.32	1.43	2.77	26.61	147.9	0.403
373	8.07	34.45	0.33	3.16	250	9.04	34.46	0.72	3.00	26.71	139.1	0.474
464	7.21	34.45	0.30	3.20	300	8.85	34.48	0.44	3.11	26.76	135.7	0.544
559	6.34	34.42	0.32	3.24	400	7.84	34.45	0.32	3.17	26.89	123.4	0.672
751	5.18	34.48	0.40	3.26	500	6.85	34.44	0.31	3.21	27.02	112.6	0.790
943	4.26	34.52	0.54	3.36	600	6.05	34.43	0.33	3.24	27.12	104.0	0.900
1144	3.67	34.51	0.72	3.18	700	5.44	34.47	0.38	3.26	27.23	94.1	0.999
					800	4.92	34.49	0.44	3.28	27.30	87.1	1.089
					1000	4.09	34.52	0.59	3.34	27.42	76.7	1.253

120.50 HORIZON; March 8, 1950; 1034 GCT; 27°31'N, 115°52.5'W; sounding, 2,300 fm; wind, 350°, force 2; weather, partly cloudy; sea, moderate; wire angle, 27°.

0	14.92	33.58	5.67	0.49	0	14.92	33.58	5.67	0.49	24.92	304.9	0.000
9	14.98	33.58	5.60	0.48	10	14.98	33.58	5.59	0.48	24.91	306.1	0.030
22	14.97	33.52	5.59	0.50	20	14.98	33.52	5.60	0.49	24.86	311.1	0.061
44	13.73	33.51	5.48	0.59	30	14.85	33.51	5.58	0.52	24.88	309.5	0.092
65	12.54	33.51	4.92	0.95	50	13.40	33.51	5.36	0.67	25.18	281.2	0.152
86	11.05	33.60	3.47	1.68	75	11.85	33.54	4.38	1.34	25.50	250.7	0.218
130	10.42	34.01	2.14	2.29	100	10.53	33.69	2.90	1.89	25.86	217.4	0.276
168	10.18	34.32	1.18	2.81	150	10.27	34.23	1.55	2.61	26.33	174.1	0.374
244	9.70	34.47	0.48	2.97	200	10.01	34.42	0.80	2.90	26.52	156.8	0.457
326	8.62	34.43	0.41	3.17	250	9.63	34.47	0.45	2.99	26.62	148.0	0.533
406	7.78	34.43	0.30	3.32	300	8.96	34.44	0.40	3.10	26.71	140.5	0.605
491	6.92	34.41	0.23	3.38	400	7.84	34.43	0.30	3.31	26.87	125.8	0.738
663	5.56	34.33	0.27	3.46	500	6.85	34.40	0.28	3.38	26.99	115.4	0.859
837	4.77	34.45	0.40	3.56	600	5.98	34.35	0.25	3.42	27.07	108.7	0.971
1033	4.03	34.48	0.62	3.39	700	5.35	34.34	0.30	3.49	27.13	102.5	1.077
					800	4.91	34.42	0.37	3.55	27.25	92.3	1.174
					1000	4.16	34.48	0.55	3.43	27.38	80.6	1.347

a) Alternate value, 9.43°C, not used in interpolation.

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

HORIZON; March 8, 1950; 0421 GCT; 27°14'N, 116°32'W; sounding, 2,100 fm; wind, 340°, force 2; weather, partly cloudy; sea, rough; wire angle, 20°. 120.60

0	15.54	33.69	5.58	0.43	0	15.54	33.69	5.58	0.43	24.87	309.8	0.000
10	15.59	33.70	5.67	0.44	10	15.59	33.70	5.67	0.44	24.86	310.5	0.031
23	-	33.65	5.56	0.41	20	15.58	33.65	5.59	0.42	24.82	314.3	0.062
47	15.46	33.68	5.56	0.41	30	15.55	33.66	5.55	0.41	24.84	313.1	0.094
70	14.09	33.60	5.33	0.60	50	15.40	33.68	5.56	0.42	24.89	309.0	0.156
103	12.00	33.57	4.32	1.18	75	13.73	33.59	5.24	0.70	25.17	282.5	0.230
144	9.86	33.84	3.17	1.77	100	12.17	33.57	4.56	1.10	25.47	254.6	0.297
190	10.15	34.26	1.50	2.40	150	9.87	34.07	3.03	1.85	26.27	179.3	0.406
282	8.90	34.28	0.84	2.78	200	10.14	34.26	1.40	2.44	26.37	170.9	0.493
379	7.36	34.31	0.72	2.95	250	9.48	34.28	0.99	2.67	26.50	159.4	0.575
472	6.86	34.36	0.36	3.08	300	8.54	34.28	0.78	2.82	26.65	145.9	0.652
569	6.10	34.36	0.26	3.18	400	7.20	34.32	0.63	2.97	26.88	124.8	0.787
761	4.98	34.41	0.40	3.08u	500	6.72	34.36	0.31	3.12	26.97	116.7	0.908
952	4.30	34.42	0.48	3.20	600	5.90	34.37	0.26	(3.18)	27.09	106.2	1.015
1153	3.73	34.52	0.59	3.05	700	5.30	34.39	0.34	(3.19)	27.18	98.2	1.117
					800	4.80	34.41	0.41	(3.19)	27.25	91.6	1.212
					1000	4.14	34.43	0.51	3.18	27.34	84.0	1.387

HORIZON; March 7, 1950; 2208 GCT; 26°54.5'N, 117°10'W; sounding, 2,100 fm; wind, 350°, force 4; weather, partly cloudy; sea, rough; wire angle, 18°. 120.70

0	15.56	33.62	5.54	0.44	0	15.56	33.62	5.54	0.44	24.81	315.4	0.000
10	15.42	33.62	5.48	0.41	10	15.42	33.62	5.48	0.41	24.83	313.6	0.031
24	15.39	33.65	5.48	0.40	20	15.39	33.64	5.48	0.40	24.86	311.0	0.063
47	14.90	33.58	5.62	0.42	30	15.36	33.64	5.53	0.40	24.87	310.4	0.094
71	13.62	33.58	5.09	0.62	50	14.75	33.58	5.61	0.43	24.95	302.9	0.155
94	12.86	33.69	4.99	0.72	75	13.51	33.59	5.06	0.63	25.22	278.1	0.228
143	10.04	33.76	3.32	1.74	100	12.58	33.70	4.90	0.77	25.49	252.9	0.294
188	9.33	34.06	2.52	2.18	150	9.92	33.79	3.20	1.90	26.04	200.8	0.408
278	7.94	34.19	1.51	2.59	200	9.13	34.09	2.36	2.23	26.41	166.9	0.499
374	7.74	34.38	0.51	2.96	250	8.35	34.15	1.77	2.45	26.58	151.5	0.579
465	6.84	34.38	0.29	3.13	300	7.84	34.25	1.27	2.69	26.73	137.6	0.651
562	6.08	34.42	0.27	3.10	400	7.52	34.38	0.40	3.04	26.88	124.8	0.783
752	4.94	34.43	0.41	3.08	500	6.53	34.39	0.28	3.12	27.03	111.7	0.901
941	4.16	34.47	0.51	3.15	600	5.79	34.42	0.28	3.10	27.14	101.2	1.007
1140	3.69	34.52	0.75	3.20	700	4.19	34.43	0.37	3.08	27.22	93.8	1.105
					800	4.70	34.44	0.42	3.09	27.29	88.0	1.195
					1000	3.99	34.48	0.60	3.16	27.40	78.4	1.362

HORIZON; March 7, 1950; 1555, 1606 GCT; 26°33.5'N, 117°51'W; sounding, 2,200 fm; wind, 350°, force 3; weather, partly cloudy; sea, very rough; wire angle, 15°, 15°. 120.80

0	15.17	33.55	5.65	0.50	0	15.17	33.55	5.65	0.50	24.84	312.4	0.000
10	15.21	33.56	5.52	0.44	10	15.21	33.56	5.52	0.44	24.84	313.1	0.031
					20	15.22	33.56	5.54	0.50	24.84	313.4	0.062
24	15.22	33.56	5.55	0.51	30	15.22	33.55	5.55	0.51	24.83	314.2	0.094
48	14.55	33.44	5.55	0.46	50	14.51	33.43	5.56	0.47	24.89	309.0	0.156
73	14.18	33.40	5.59	0.53	75	14.14	33.40	5.58	0.54	24.94	304.5	0.233
97	12.95	33.49	5.29	0.68	100	12.50	33.50	5.23	0.72	25.35	266.2	0.304
149	10.00	33.57	3.92	1.59	150	9.95	33.57	3.90	1.57	25.87	217.5	0.426
197	9.32	33.95	2.98	2.12	200	9.29	33.97	2.92	2.16	26.29	178.3	0.524
290	8.62	34.27	1.14	2.74	250	8.89	34.21	1.90	2.52	26.54	155.3	0.607
388	7.40	34.29	0.72	3.10	300	8.53	34.28	1.08	2.79	26.65	145.7	0.683
482	6.86	34.31	0.37	3.27	400	7.33	34.29	0.67	3.13	26.84	128.8	0.819
580	6.10	34.38	0.30	3.31	500	6.73	34.32	0.34	3.28	26.94	119.9	0.944
774	4.99	34.43	0.51	3.31	600	5.95	34.39	0.32	3.31	27.10	105.4	1.056
966	4.22	34.47	0.58	3.34	700	5.34	34.41	0.40	3.31	27.19	97.2	1.158
1168	3.66	34.50	0.72	3.18	800	4.87	34.44	0.47	3.32	27.27	90.1	1.252
					1000	4.11	34.48	0.61	3.32	27.38	79.9	1.422

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

120.90 HORIZON; March 7, 1950; 0942 GCT; 26°14'N, 118°27'W; sounding, 2,380 fm; wind, 350°, force 4; weather, cloudy; sea, very rough; wire angle, 17°.

0	15.36	33.58	5.59	0.51	0	15.36	33.58	5.59	0.51	24.82	314.4	0.000
10	15.41	33.60	5.56	0.46	10	15.41	33.60	5.56	0.46	24.82	314.3	0.031
24	15.39	33.58	5.54	0.49	20	15.40	33.58	5.54	0.49	24.81	315.7	0.063
48	15.37	33.60	5.54	0.47	30	15.39	33.58	5.53	0.49	24.81	315.9	0.094
72	15.03	33.53	5.61	0.44	50	15.36	33.60	5.56	0.50	24.84	314.1	0.158
96	14.49	33.48	5.64	0.50	75	14.99	33.51	5.62	0.44	24.85	313.6	0.236
189p	9.97	33.77	3.30	2.03	100	13.4	33.48	5.62	0.53	25.16	283.8	0.311
281p	9.46	34.27	1.10	2.85	150	10.6	33.58	4.60	1.22	25.76	227.7	0.438
387p	8.24	34.36	0.47	3.22	200	9.89	33.84	3.00	2.19	26.09	197.5	0.545
498p	7.04	34.38	0.35	3.37	250	9.64	34.18	1.54	2.65	26.39	169.6	0.636
711p	5.42	34.43	0.37	3.49	300	9.27	34.30	0.95	2.95	26.55	155.7	0.717
917p	4.40	34.49	0.47	3.56	400	8.07	34.37	0.42	3.25	26.79	133.8	0.862
1128p	3.78	34.49	0.65	3.44	500	(7.01)	(34.38)	(0.35)	(3.37)	(26.95)	(119.3)	(0.989)
					600	(6.18)	(34.40)	(0.35)	(3.44)	(27.08)	(107.6)	(1.102)
					700	(5.49)	(34.43)	(0.37)	(3.48)	(27.19)	(97.7)	(1.205)
					800	4.95	34.46	0.41	3.54	27.28	89.7	(1.299)
					1000	4.09	34.49	0.54	3.54	27.39	78.9	(1.467)

120.100 HORIZON; March 7, 1950; 0329 GCT; 25°53'N, 119°05'W; sounding, 2,200 fm; wind, 350°, force 3; weather, cloudy; sea, very rough; wire angle, 25°.

0	16.43	33.80	5.65	0.45	0	16.43	33.80	5.65	0.45	24.75	321.3	0.000
9	16.48	33.77	5.48	0.42	10	16.47	33.77	5.46	0.42	24.72	324.3	0.032
22	16.45	33.82	5.49	0.41	20	16.46	33.82	5.46	0.41	24.76	320.8	0.064
44	16.05	33.75	5.73	0.39	30	16.35	33.81	5.56	0.40	24.77	319.4	0.096
66	15.86	33.71	5.75	0.39	50	15.99	33.74	5.75	0.38	24.80	317.4	0.160
88	14.59	33.66	5.57	0.44	75	15.76	33.68	5.70	0.40	24.81	317.5	0.240
136	12.21	33.71	3.39	1.50	100	13.49	33.66	5.06	0.56	25.28	273.2	0.313
180	11.24	33.95	2.55	2.04	150	11.94	33.76	3.03	1.71	25.66	237.8	0.442
268	9.32	34.23	1.35	2.60	200	10.74	34.04	2.26	2.20	26.09	197.3	0.550
361	8.04	34.36	0.66	3.01	250	9.59	34.19	1.56	2.49	26.41	167.9	0.641
449	7.04	34.31	0.44	3.12	300	8.79	34.30	1.08	2.78	26.63	148.0	0.720
543	6.45	34.40	0.31	3.13	400	7.54	34.34	0.55	3.09	26.84	128.2	0.858
726	5.27	34.40	0.40	3.15	500	6.69	34.36	0.33	3.12	26.98	116.1	0.980
908	4.42	34.51	0.49	3.31	600	6.11	34.40	0.34	3.13	27.09	106.8	1.092
1102	3.82	34.51	0.64	3.23	700	5.45	34.40	0.38	3.14	27.17	99.4	1.195
					800	4.88	34.46	0.43	3.22	27.28	88.8	1.289
					1000	4.08	34.51	0.56	3.28	27.41	77.3	1.455

120.110 HORIZON; March 6, 1950; 2116 GCT; 25°30.5'N, 119°44'W; sounding, 2,400 fm; wind, 360°, force 3; weather, cloudy; sea, high; wire angle, 17°.

0	17.29	33.96	4.38r	0.37	0	17.29	33.96	(5.45)	0.37	24.67	328.7	0.000
10	17.28	33.95	5.41	0.37	10	17.28	33.95	5.41	0.37	24.66	329.7	0.033
24	17.16	33.93	5.17	0.36	20	17.17	33.94	5.25	0.37	24.68	328.0	0.066
53	16.24	33.78	4.95	0.37	30	17.15	33.90	5.08	0.36	24.65	331.1	0.099
77	16.20	33.77	5.44	0.39	50	16.23	33.79	4.97	0.37	24.79	318.7	0.164
106	13.78	33.60	5.03	0.67	75	16.21	33.77	5.43	0.39	24.78	320.6	0.244
158	10.96	33.80	2.97	1.86	100	14.20	33.61	5.20	0.60	25.09	290.9	0.320
210	9.86	34.11	2.20	2.44	150	11.21	33.74	3.39	1.62	25.78	226.5	0.450
312	8.24	34.22	1.21	2.84	200	10.04	34.08	2.30	2.39	26.25	182.4	0.552
418	7.37	34.31	0.55	3.11	250	9.15	34.17	1.78	2.62	26.47	162.3	0.638
522	6.60	34.33	0.34	3.20	300	8.41	34.21	1.31	2.81	26.61	149.0	0.716
626	5.78	34.38	0.30	3.30	400	7.49	34.30	0.62	3.07	26.82	130.4	0.855
830	4.88	34.42	0.42	3.31	500	6.79	34.33	0.36	3.19	26.94	119.6	0.980
1037	4.06	34.49	0.60	3.33	600	5.98	34.36	0.30	3.27	27.07	108.0	1.094
1240	3.48	34.56	0.77	3.14	700	5.40	34.40	0.35	3.31	27.18	98.7	1.197
					800	4.98	34.41	0.42	3.31	27.23	93.7	1.293
					1000	4.23	34.46	0.55	3.33	27.35	82.9	1.470

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

HORIZON; March 3, 1950; 0646 GCT; 27°18'N, 114°51.5'W; sounding, 600 fm; wind, 330°, force 5; weather, partly cloudy; sea, rough; wire angle, 55°. 123.40

0	14.63	33.58	5.84	0.49	0	14.63	33.58	5.84	0.49	24.98	299.1	0.000
6	14.68	33.58	5.76	0.46	10	14.64	33.58	5.78	0.46	24.98	299.5	0.030
11	14.63	33.58	5.80	0.51	20	14.57	33.58	5.58	0.59	24.99	298.4	0.060
20	13.95r	33.58	5.58	0.59	30	14.47	33.58	5.70	0.47	25.01	296.7	0.090
27	14.52	33.58	5.68	0.46	50	11.55	33.61	4.01	1.50	25.62	238.9	0.143
35	13.92	33.58	5.75	0.54	75	10.95	33.88	2.70	2.11	25.93	209.8	0.199
51	11.51	33.61	4.01	1.50	100	10.87	34.05	2.01	2.39	26.08	196.4	0.250
63	11.02	33.78	3.09	1.92	150	10.62	34.31	1.16	2.72	26.33	174.2	0.343
93	10.88	34.00	2.17	2.32	200	10.21	34.43	0.68	2.98	26.49	159.3	0.426
127	10.72	34.23	1.42	2.64	250	9.80	34.46	0.54	3.09	26.59	151.5	0.504
160	10.56	34.34	1.07	2.74	300	9.37	34.47	0.41	3.17	26.67	144.7	0.577
200	10.21	34.43	0.68	2.98								
236	9.90	34.29r	0.59	3.06								
275	9.64	34.47	0.50	3.14								
358	8.52	34.47	0.29	3.22								

HORIZON; March 3, 1950; 1325 GCT; 26°55.5'N, 115°30.5'W; sounding, 2,050 fm; wind, 340°, force 7; weather, partly cloudy; sea, very rough; wire angle, 55°. 123.50

0	16.05	33.77	5.53	0.48	0	16.05	33.77	5.53	0.48	24.81	315.2	0.000
7	16.08	33.74	5.54	0.50	10	16.08	33.74	5.54	0.50	24.78	318.3	0.032
18	16.07	33.77	5.53	0.49	20	16.07	33.77	5.53	0.48	24.81	316.0	0.063
35	15.97	33.76	5.56	0.47	30	16.02	33.77	5.54	0.47	24.82	315.2	0.095
52	15.52	33.68	5.62	0.48	50	15.59	33.70	5.60	0.47	24.86	311.6	0.158
69	15.14	33.62	5.68	0.51	75	14.87	33.59	5.64	0.54	24.93	305.2	0.235
101	12.60	33.53	4.70	1.09	100	12.75	33.53	4.82	1.04	25.32	268.6	0.306
130	10.82	33.67	4.70r	1.79	150	10.12	33.78	3.38	2.03	26.00	204.9	0.425
188	9.57	34.00	2.44	2.42	200	9.55	34.25	2.11	2.53	26.46	161.9	0.517
239	9.62	34.40	0.95	2.85	250	9.57	34.40	0.87	2.90	26.58	152.2	0.595
293	9.03	34.40	0.62	3.07	300	8.96	34.40	0.61	3.08	26.68	143.4	0.669
453	7.40	34.37	0.41	3.26	400	7.94	34.38	0.48	3.21	26.82	131.2	0.806
560	6.37	34.40	0.22	3.50	500	6.95	34.38	0.31	3.36	26.96	118.3	0.930
714	5.33	34.44	0.26	3.50	600	6.05	34.42	0.21	3.50	27.11	104.6	1.043
					700	5.40	34.44	0.25	3.50	27.21	95.8	1.142

HORIZON; March 3, 1950; 1948 GCT; 26°30'N, 116°16'W; sounding, 2,100 fm; wind, 340°, force 6; weather, cloudy; sea, rough; wire angle, 40°. 123.60

8	16.79	33.87	5.43	0.47	0	(16.79)	(33.87)	(5.43)	(0.47)	(24.72)	(323.8)	(0.000)
24	16.84	33.89	5.38	0.48	10	16.79	33.87	5.43	0.48	24.72	324.1	0.032
47	16.82	33.89	5.29	0.47	20	16.82	33.89	5.40	0.48	24.73	323.4	0.065
71	16.82	33.89	5.26	0.41	30	16.84	33.89	5.36	0.48	24.72	324.3	0.097
94	16.74	33.86	5.24	0.41	50	16.82	33.89	5.29	0.46	24.73	324.3	0.162
120	13.84	33.59	5.01	0.63	75	16.80	33.89	5.28	0.41	24.73	324.7	0.243
141	11.93	33.58	4.23	1.26	100	16.65	33.82	5.21	0.44	24.71	327.4	0.325
188	10.52	33.84	2.69	1.92	150	11.46	33.58	3.94	1.48	25.61	242.4	0.467
282	9.50	34.36	0.94	2.73	200	10.35	34.00	2.45	2.04	26.13	193.4	0.576
373	8.60	34.41	0.49	2.92	250	9.84	34.30	1.43	2.38	26.45	164.0	0.665
469	7.49	34.41	0.28	3.12	300	9.35	34.38	0.83	2.63	26.60	151.1	0.744
753	5.06	34.20r	1.09r	2.88r	400	8.29	34.41	0.40	2.99	26.79	134.2	0.887
950	4.32	34.49	0.49	3.40	500	(7.14)	(34.41)	(0.30)	(3.15)	(26.96)	(118.8)	(1.013)
1160	3.71	34.52	0.75	3.36	600	(6.18)	(34.42)	(0.35)	(3.22)	(27.09)	(106.2)	(1.126)
					700	(5.42)	(34.44)	(0.38)	(3.27)	(27.20)	(96.1)	(1.227)
					800	4.86	(34.46)	(0.42)	(3.34)	(27.29)	(88.5)	(1.319)
					1000	4.17	34.50	0.51	3.40	27.39	79.1	(1.487)

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OBSERVED					INTERPOLATED					COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m

127.40 HORIZON; March 4, 1950; 1427 GCT; 26°43.5'N, 114°30'W; sounding, 2,100 fm; wind, 340°, force 5; weather, partly cloudy; sea, very rough; wire angle, 28°.

0	15.10	33.64	5.72	0.54	0	15.10	33.64	5.72	0.54	24.92	304.3	0.000
9	15.14	33.64	5.71	0.53	10	15.14	33.64	5.70	0.53	24.91	305.5	0.030
22	15.13	33.64	5.68	0.52	20	15.15	33.64	5.68	0.52	24.91	306.0	0.061
49	13.74	33.58	5.29	0.64	30	15.12	33.64	5.58	0.53	24.92	305.6	0.092
71	12.66	33.58	4.70	1.06	50	13.60	33.58	5.21	0.68	25.19	279.9	0.150
97	11.24	33.78	3.12	1.84	75	12.45	33.60	4.58	1.22	25.44	257.4	0.217
146	10.40	34.20	1.75	2.39	100	11.15	33.82	3.00	1.89	25.85	218.5	0.277
194	10.12	34.38	1.08	2.78	150	10.39	34.23	1.68	2.42	26.30	176.3	0.376
288	9.32	34.47	0.48	3.10	200	10.08	34.39	1.04	2.81	26.48	160.2	0.459
387	7.94	34.45	0.29	3.30	250	9.72	34.46	0.64	3.00	26.60	157.6	0.539
482	7.16	34.40	0.21	3.35	300	9.17	34.47	0.44	3.13	26.70	141.1	0.614
769	5.26	34.31r	1.00r	2.62r	400	7.81	34.44	0.27	3.31	26.88	124.7	0.747
971	4.28	34.49	0.45	3.47	500	(7.02)	(34.40)	(0.24)	(3.36)	(26.97)	(117.9)	(0.868)
1171	3.71	34.52	0.67	3.57	600	(6.31)	(34.41)	(0.27)	(3.38)	(27.07)	(108.9)	(0.981)
					700	(5.69)	(34.44)	(0.31)	(3.41)	(27.17)	(99.6)	(1.086)
					800	5.09	(34.45)	(0.34)	(3.43)	(27.25)	(92.2)	(1.181)
					1000	4.19	34.49	0.46	3.48	27.38	80.2	(1.354)

127.50 HORIZON; March 4, 1950; 0814 GCT; 26°23'N, 115°08'W; sounding, 1,750 fm; wind, 320°, force 6; weather, overcast; sea, very rough; wire angle, 41°.

0	16.25	33.82	5.51	0.42	0	16.25	33.82	5.51	0.42	24.80	315.6	0.000
8	16.30	33.80	5.39	0.46	10	16.30	33.79	5.41	0.46	24.77	319.2	0.032
23	16.30	33.75	5.51	0.45	20	16.30	33.75	5.50	0.45	24.74	322.5	0.064
45	16.31	33.75	5.15	0.31	30	16.31	33.75	5.48	0.40	24.74	323.1	0.096
67	16.34	33.80	5.35	0.46	50	16.32	33.75	5.17	0.32	24.73	323.6	0.161
89	14.18	33.66	5.03	0.76	75	15.70	33.69	5.30	0.54	24.83	315.3	0.241
131	10.50	33.68	3.71	1.72	100	12.78	33.66	4.76	1.00	25.42	259.5	0.312
174	9.94	33.98	2.39	2.19	150	10.19	33.75	3.06	1.95	25.97	208.1	0.430
254	9.06	34.31	1.00	2.81	200	9.63	34.17	1.87	2.45	26.39	169.0	0.524
333	8.58	34.38	0.46	2.95	250	9.10	34.30	1.05	2.79	26.58	151.8	0.604
419	7.79	34.42	0.31	3.25	300	8.82	34.36	0.63	2.91	26.67	144.2	0.678
675	5.63	34.34	0.35	3.32	400	7.97	34.41	0.32	3.17	26.84	129.2	0.814
853	4.74	34.45	0.38	3.41	500	7.03	34.36	0.32	3.31	26.93	121.0	0.940
1056	3.98	34.45	0.55	3.44	600	6.14	34.34	0.34	3.32	27.04	111.6	1.056
					700	5.49	34.35	0.37	3.33	27.12	103.6	1.163
					800	4.97	34.42	0.38	3.38	27.24	93.0	1.261
					1000	4.16	34.45	0.49	3.44	27.35	82.7	1.438

127.60 HORIZON; March 4, 1950; 0201 GCT; 26°03'N, 115°46.5'W; sounding, 2,250 fm; wind, 340°, force 5; weather, cloudy; sea, very rough; wire angle, 47°.

0	17.27	34.29r	5.44	0.45	0	17.27	(34.04)	5.44	0.45	(24.73)	(322.3)	(0.000)
7	17.28	34.04	5.33	0.45	10	17.28	34.04	5.35	0.45	24.73	322.8	0.032
22	17.27	34.04	5.40	0.45	20	17.28	34.04	5.39	0.45	24.73	323.3	0.065
42	16.35	33.87	5.46	0.37	30	17.24	34.03	5.43	0.42	24.73	323.3	0.097
62	15.18	33.69	5.56	0.52	50	15.82	33.80	5.48	0.39	24.89	309.2	0.160
83	13.19	33.60	4.60	1.02	75	14.00	33.61	5.10	0.83	25.13	286.4	0.235
121	10.60	33.64	3.81	1.64	100	11.40	33.60	4.22	1.31	25.63	238.8	0.300
157	10.09	33.95	2.35	2.17	150	10.17	33.85	2.71	2.11	26.05	200.5	0.410
229	9.38	34.31	2.01	2.75	200	9.59	34.19	2.10	2.55	26.41	166.9	0.502
295	9.12	34.42	0.56	3.10	250	9.31	34.37	1.77	2.87	26.60	150.3	0.581
366	8.37	34.43	0.32	3.33	300	9.08	34.42	0.53	3.12	26.67	143.7	0.655
408a)	7.90a)	34.43	0.29	3.34	400	8.00	34.43	0.29	3.34	26.85	128.2	0.791
584	6.34	34.34r	0.57r	3.11r	500	7.03	(34.43)	(0.27)	(3.36)	(26.99)	(115.8)	(0.913)
738	5.28	34.43	0.22	3.40	600	6.23	(34.43)	(0.25)	(3.38)	(27.10)	(106.2)	(1.024)
920	4.38	34.43	0.42	3.46	700	5.53	(34.43)	(0.24)	(3.40)	(27.18)	(98.3)	(1.126)
					800	4.94	34.43	0.26	3.42	27.25	91.8	(1.221)
					1000	(4.11)	(34.43)	–	–	(27.34)	(83.6)	(1.396)

a) Alternate depth, 385 meters with temperature 8.14°C, not used in interpolation.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

HORIZON; March 4, 1950; 2046 GCT; 26°10.5'N, 113°46.5'W; sounding, 780 fm; wind, 320°, force 4; weather, partly cloudy; sea, rough; wire angle, 32°. 130.35

0	15.55	33.68	5.34	0.42	0	15.55	33.68	5.34	0.42	24.85	311.2	0.000	
9	15.51	33.68	5.60	0.41	10	15.50	33.68	5.60	0.41	24.87	309.9	0.031	
22	15.44	33.68	5.54	0.43	20	15.44	33.68	5.56	0.43	24.88	309.1	0.062	
43	14.62	33.64	5.51	0.44	30	15.33	33.67	5.53	0.43	24.90	307.8	0.093	
63	13.11	33.60	5.46	0.95	50	14.08	33.63	5.49	0.54	25.13	285.7	0.152	
83	11.61	33.62	3.73	1.49	75	12.10	33.60	5.10	1.32	25.50	250.9	0.219	
124	11.15	34.14	1.91	2.31	100	11.9	33.92	2.95	1.89	25.80	223.6	0.278	
161	10.64	34.33	1.15	2.59	150	10.79	34.28	1.36	2.52	26.27	179.3	0.379	
235	9.77	34.45	0.49	3.01	200	10.18	34.42	0.74	2.82	26.49	159.6	0.464	
313	8.82	34.45	0.34	3.13	250	9.56	34.45	0.42	3.05	26.62	148.2	0.541	
392	8.08	34.47	0.29	3.20	300	8.95	34.45	0.35	3.12	26.72	139.6	0.613	
475	7.18	34.49	0.25	3.24	400	7.99	34.47	0.29	3.21	26.88	125.1	0.745	
644	6.00	34.38r	0.70r	2.78r	500	6.99	(34.49)	(0.25)	(3.24)	(27.04)	(110.9)	(0.863)	
817	5.11	34.49	0.33	3.39	600	6.24	(34.49)	(0.28)	(3.28)	(27.14)	(102.0)	(0.970)	
1008	4.10	34.52	0.58	3.38	700	5.72	(34.49)	(0.30)	(3.34)	(27.21)	(96.3)	(1.069)	
					800	5.19	(34.49)	(0.32)	(3.39)	(27.27)	(90.6)	(1.162)	
					1000	4.13	34.52	0.56	3.38	27.41	77.3	(1.330)	

HORIZON; March 5, 1950; 0105, 0124, 0145 GCT; 26°09'N, 114°08'W; sounding, 1,550 fm; wind, 310°, force 4; weather, cloudy; sea, very rough; wire angle, 36°, 42°, 39°. 130.40

0	16.08	33.78	5.58	0.45	0	16.08	33.78	5.58	0.45	24.81	314.7	0.000	
9	16.12	33.76	5.58	0.41	10	16.12	33.76	5.58	0.41	24.79	317.5	0.032	
21	16.10	33.77	5.58	0.41	20	16.10	33.77	5.58	0.41	24.80	316.7	0.063	
46	14.87	33.62	5.60	0.50	30	15.95	33.73	5.58	0.43	24.80	316.7	0.095	
66	13.14	33.54	4.98	0.78	50	14.62	33.59	5.58	0.56	24.99	299.4	0.157	
					75	11.54	33.54	4.56	0.99	25.56	245.4	0.225	
83	11.43	33.56	4.13	1.28	100	11.77	33.69	2.80	2.05	25.64	238.6	0.285	
123	12.37	34.34	1.23	2.35	150	11.75	34.42	0.88	2.49	26.21	185.6	0.391	
					200	10.85	34.46	0.64	2.64	26.40	168.2	0.480	
156	11.55	34.43	0.81	2.51	250	10.07	34.47	0.52	2.76	26.55	155.2	0.560	
232	10.32	34.47	0.57	2.72	300	9.34	34.45	0.35	2.86	26.65	145.7	0.636	
315	9.14	34.45	0.34	2.88	400	8.11	34.42	0.33	3.00	26.82	130.8	0.774	
391	8.22	34.42	0.33	2.99	500	7.10	34.42	(0.24)	(3.07)	26.97	117.5	0.898	
467	7.38	34.42	0.22	3.06	600	6.24	34.42	(0.25)	(3.12)	27.09	107.2	1.011	
621	6.07	34.42	0.32u	3.01u	700	5.55	34.42	(0.30)	(3.16)	27.17	99.3	1.114	
781	5.11	34.43	0.32	3.19	800	5.02	34.43	0.33	3.20	27.24	93.0	1.210	
963	4.44	34.46	0.43	3.23	1000	(4.30)	(34.47)	(0.49)	(3.23)	(27.36)	(83.0)	(1.386)	

HORIZON; March 5, 1950; 0758 GCT; 25°51.5'N, 114°45'W; sounding, 2,300 fm; wind, 320°, force 4; weather, cloudy; sea, rough; wire angle, 29°. 130.50

0	18.10	34.23	5.13	0.53	0	18.10	34.23	5.13	0.53	24.67	328.2	0.000	
9	18.14	34.22	4.88	0.53	10	18.14	34.22	4.89	0.52	24.66	329.6	0.033	
22	18.13	34.21	4.89	0.46	20	18.13	34.21	4.89	0.46	24.65	330.6	0.066	
43	18.05	34.18	5.08	0.46	30	18.11	34.20	5.02	0.46	24.65	331.2	0.099	
64	15.88	33.91	4.18	1.03	50	17.75	34.15	4.71	0.52	24.70	326.8	0.165	
85	12.56	33.58	4.38	1.15	75	13.60	33.66	4.37	1.11	25.26	274.6	0.240	
129	11.00	33.90	2.66	2.09	100	11.75	33.63	3.90	1.34	25.59	242.9	0.305	
169	10.90	34.31	1.28	2.69	150	10.95	34.13	1.75	2.44	26.13	193.1	0.414	
250	10.26	34.52	0.45	3.13	200	10.75	34.45	0.80	2.91	26.41	167.1	0.504	
335	8.97	34.48	0.38	3.16	250	10.26	34.52	0.45	3.13	26.55	154.7	0.584	
416	7.87	34.44	0.24	3.30	300	9.58	34.51	0.41	3.15	26.66	145.1	0.659	
502	7.09	34.43	0.20	3.31	400	8.11	34.44	0.25	3.27	26.84	129.3	0.796	
671	5.60	34.39u	0.39u	3.31u	500	7.13	34.43	0.20	3.31	26.97	117.1	0.920	
846	4.72	34.48	0.35	3.52	600	6.16	(34.43)	(0.25)	(3.35)	(27.12)	(104.1)	(1.031)	
1046	4.00	34.53	0.53	3.32	700	5.45	(34.45)	(0.28)	(3.43)	(27.21)	(95.9)	(1.131)	
					800	4.94	(34.47)	(0.31)	(3.49)	(27.29)	(88.8)	(1.223)	
					1000	4.15	34.52	0.49	3.37	27.41	77.5	(1.389)	

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

130.60 HORIZON; March 5, 1950; 1411 GCT; 25°31'N, 115°30'W; sounding, 2,100 fm; wind, 320°, force 5; weather, partly cloudy; sea, rough; wire angle, 23°.

0	16.62	33.91	5.58	0.48	0	16.62	33.91	5.58	0.48	24.79	317.0	0.000
9	16.62	33.87	5.59	0.45	10	16.62	33.87	5.59	0.45	24.76	320.3	0.032
28	-	33.91	5.57	0.52	20	(16.55)	33.90	5.58	0.48	(24.80)	(316.8)	(0.064)
55	14.90	33.73	5.52	0.61	30	(16.37)	33.91	5.57	0.53	(24.85)	(312.3)	(0.095)
83	12.00	33.64	3.94	1.50	50	(15.40)	33.77	5.53	0.59	(24.96)	(302.6)	(0.157)
110	10.74	33.73	3.38	1.83	75	12.57	33.65	4.95	1.13	25.45	256.0	(0.226)
162	10.07	34.02	2.32	2.29	100	11.00	33.67	3.56	1.76	25.76	226.7	(0.287)
209	9.80	34.53	1.16	2.76	150	10.14	33.94	2.63	2.20	26.12	193.3	(0.392)
309	8.75	34.45	0.46	3.04	200	9.85	34.52	1.31	2.72	26.62	146.8	(0.477)
418	7.60	34.43	0.28	3.31	250	9.39	34.50	0.78	2.91	26.68	141.9	(0.549)
537	6.31	34.45	0.31	3.47	300	8.84	34.46	0.48	3.03	26.74	137.1	(0.619)
653	5.53	34.45	0.27	3.55	400	7.77	34.43	0.30	3.27	26.88	124.9	(0.750)
881	4.36	34.43	0.49	3.41u	500	6.67	34.44	0.30	3.42	27.05	110.1	(0.867)
1088	3.78	34.52	0.69	3.56	600	5.85	34.45	0.30	3.51	27.16	99.7	(0.972)
1303	3.28	34.57	0.89	3.58	700	5.26	34.45	0.30	3.55	27.23	93.3	(1.068)
					800	4.72	34.44	0.40	3.55	27.29	88.4	(1.159)
					1000	3.99	34.47	0.60	3.56	27.39	79.1	(1.326)

130.70 HORIZON; March 5, 1950; 2024, 2041, 2052 GCT; 25°08.5'N, 116°02'W; sounding, 2,300 fm; wind, 350°, force 4; weather, cloudy; sea, very rough; wire angle, 39°, missing, 45°.

0	17.42	34.11	4.30	0.46
8	17.46	34.02	5.24	0.43
24	-	34.05	5.28	0.46
47	17.21	33.96	5.21	0.43
64	15.69	33.73	5.35	0.44
85	14.37	33.64	5.23	0.63
100p	14.32	33.68	5.07	0.76
202p	9.94	34.29	1.25	2.69
315p	8.68	34.43	0.67	2.95
434p	7.52	34.43	0.31	3.18
534p	6.50	34.40	0.24	3.33
758p	5.06	-	-	-
972p	4.15	34.51	0.50	3.37
1165p	3.66	34.49	0.69	3.33

130.80 HORIZON; March 6, 1950; 0237 GCT; 24°49'N, 116°40'W; sounding, 2,350 fm; wind, 340°, force 3; weather, overcast; sea, very rough; wire angle, 25°.

0	16.80	33.84	5.54	0.43	0	16.80	33.84	5.54	0.43	24.69	326.6	0.000
9	16.82	33.87	5.39	0.43	10	16.81	33.87	5.39	0.43	24.71	324.5	0.032
27	16.69	33.84	5.42	0.45	20	16.76	33.86	5.40	0.44	24.72	324.4	0.065
54	-	33.86	5.32	0.42	30	(16.66)	33.84	5.41	0.45	(24.72)	(324.1)	(0.097)
82	15.69	33.75	5.35	0.41	50	(16.45)	33.86	5.34	0.42	(24.79)	(318.7)	(0.162)
109	13.56	33.60	5.09	0.69	75	(15.89)	33.80	5.35	0.40	(24.87)	(311.4)	(0.240)
163	12.18	34.14	1.72	2.18	100	13.88	33.61	5.24	0.52	25.16	284.5	(0.315)
215	10.03	34.23	1.58	2.54	150	12.50	34.08	1.90	2.00	25.80	224.6	(0.442)
318	9.11	34.42	0.62	2.95	200	10.38	34.20	1.64	2.46	26.28	179.3	(0.543)
419	7.84	34.42	0.31	3.17	250	9.70	34.31	1.33	2.69	26.48	161.0	(0.628)
526	6.88	34.42	0.27	3.22	300	9.33	34.41	0.78	2.89	26.62	148.6	(0.706)
630	5.96	34.43	0.22	3.24	400	8.03	34.42	0.33	3.14	26.84	129.5	(0.844)
840	4.71	34.40u	0.42u	3.06r	500	7.10	34.42	0.30	3.21	26.97	117.5	(0.968)
1042	3.98	34.47	0.54	3.23	600	6.21	34.43	0.24	3.24	27.10	106.1	(1.080)
1236	3.44	34.52	0.79	3.02	700	5.45	34.43	0.29	3.24	27.19	97.3	(1.181)
					800	4.88	34.43	0.36	3.24	27.25	91.7	(1.276)
					1000	4.11	34.45	0.51	3.24	27.36	82.1	(1.450)

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

40.45

BLACK DOUGLAS; April 16, 1950; 0601 GCT; 41°33'N, 125°00'W; sounding, 700 fm; wind, 310°, force 2; weather, fog; sea, rough; wire angle, 0°.

0	10.39	32.48	6.39	0	10.39	32.48	6.39	24.94	302.4	0.000
10	10.36	32.52	6.39	10	10.36	32.52	6.39	24.98	299.0	0.030
25	10.19	32.59	6.33	20	10.25	32.56	6.36	25.03	294.8	0.060
50	9.89	-	6.08	30	10.15	32.62	6.29	25.09	288.7	0.089
75	8.67	33.08	4.98	50	9.89	32.76	6.08	25.24	274.7	0.145
100	8.35	33.48	3.86	75	8.67	33.08	4.98	25.69	232.7	0.209
155	8.00	33.82	2.71	100	8.35	33.48	3.86	26.05	198.7	0.263
204	7.42	33.96	2.25	150	8.03	33.80	2.78	26.35	171.3	0.355
301	6.40	-	-	200	7.48	33.95	2.28	26.55	152.9	0.436
402	5.88	34.09	1.04	250	6.92	(34.01)	1.88	(26.67)	(141.8)	(0.510)
498	5.21	34.20	0.67	300	6.43	(34.04)	1.53	(26.76)	(133.7)	(0.578)
599	4.68	34.25	0.44	400	5.90	(34.09)	1.05	(26.87)	(124.5)	(0.707)
696	4.42	34.27	0.40	500	5.20	34.20	0.67	27.04	108.8	(0.824)
798	4.10	34.33	0.37	600	4.66	34.25	0.44	27.14	99.6	(0.928)
897	3.92	34.38	0.42	700	4.41	34.27	0.40	27.19	96.2	(1.026)
				800	4.09	34.33	0.37	27.27	88.7	(1.118)
				1000	(3.64)	(34.43)		(27.39)	(78.1)	(1.286)

40.50

BLACK DOUGLAS; April 16, 1950; 0122 GCT; 41°23'N, 125°23'W; sounding, 1,700 fm; wind, 260°, force 1; weather, partly cloudy; sea, rough; wire angle, 5°.

0	11.27	32.65	6.50	0	11.27	32.65	6.50	24.92	304.3	0.000
10	10.24	32.62	6.45	10	10.24	32.62	6.45	25.08	290.0	0.030
25	9.95	32.61	6.49	20	10.04	32.61	6.47	25.10	287.7	0.058
50	9.89	32.61	6.47	30	9.95	32.61	6.49	25.11	286.7	0.087
75	9.43	32.79	5.96	50	9.89	32.61	6.47	25.13	285.2	0.144
99	8.31	33.04	5.39	75	9.43	32.79	5.96	25.32	268.0	0.214
153	7.88	33.82	2.92	100	8.32	33.25	5.30	25.88	215.4	0.274
201	7.43	33.93	2.50	150	7.91	33.80	3.00	26.37	169.5	0.370
298	6.50	34.00	1.76	200	7.45	33.93	2.50	26.54	154.0	0.451
399	5.75	34.05	1.14	250	6.97	34.00	2.13	26.66	143.1	0.526
494	5.29	34.09	0.78	300	6.48	34.03	1.75	26.75	134.9	0.595
593	5.00	34.20	0.54	400	5.74	34.05	1.13	26.86	125.5	0.725
788	4.18	34.30	0.37	500	5.27	34.10	0.76	26.95	117.1	0.846
982	3.66	34.38	0.46	600	4.98	34.21	0.54	27.08	106.5	0.958
1184	3.21	34.42	0.68	700	4.52	34.26	0.45	27.17	98.2	1.060
				800	4.14	34.30	0.37	27.24	91.7	1.155
				1000	3.64	34.39	0.47	27.36	81.0	1.328

40.60

BLACK DOUGLAS; April 15, 1950; 1946 GCT; 41°03'N, 126°09'W; sounding, 1,680 fm; wind, 260°, force 1; weather, overcast; sea, rough; wire angle, 13°.

0	11.21	32.74	6.06	0	11.21	32.74	6.06	25.00	297.1	0.000
10	11.02	32.74	5.94	10	11.02	32.74	5.94	25.04	293.9	0.030
25	10.87	32.72	5.85	20	10.90	32.72	5.87	25.04	293.5	0.059
49	10.74	32.74	5.84	30	10.84	32.72	5.85	25.05	292.8	0.088
73	9.88	32.83	5.59	50	10.74	32.74	5.84	25.08	290.1	0.147
97	8.79	33.13	4.62	75	9.82	32.84	5.44	25.32	268.3	0.216
151	7.77	33.69	3.48	100	8.67	33.15	4.55	25.74	228.0	0.278
199	7.61	33.93	2.59	150	7.78	33.68	3.50	26.29	176.3	0.380
295	6.60	34.02	1.91	200	7.61	33.93	2.55	26.51	156.3	0.462
394	5.81	34.09	0.97	250	7.14	33.99	2.20	26.63	146.1	0.538
487	5.35	34.13	0.69	300	6.56	34.02	1.86	26.73	136.8	0.609
585	4.86	34.22	0.43	400	5.77	34.09	0.93	26.88	122.8	0.738
775	4.38	34.36	0.32	500	5.27	34.14	0.66	26.98	114.1	0.857
963	3.62	34.40	0.42	600	4.81	34.23	0.40	27.11	103.1	0.966
1162	3.18a)	34.47	0.57	700	4.57	34.31	0.32	27.20	94.9	1.065
				800	4.29	34.37	0.34	27.28	88.1	1.156
				1000	3.51	34.41	0.45	27.39	78.1	1.322

a) Mean value of 3.21 and 3.15°C.

SIO

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

40.70 BLACK DOUGLAS; April 15, 1950; 1359 GCT; 40°42'N, 126°55'W; sounding, 1,680 fm; wind 220°, force 2; weather, overcast; sea, rough; wire angle, 4°.

0	10.84	32.70	6.36	0	10.84	32.70	6.36	25.04	293.3	0.000
10	10.84	32.70	6.37	10	10.84	32.70	6.37	25.04	293.3	0.029
25	10.82	32.72	6.30	20	10.83	32.71	6.35	25.05	293.1	0.059
50	10.63	32.79	6.35	30	10.80	32.73	6.30	25.07	291.2	0.088
75	9.98	32.95	5.79	50	10.63	32.79	6.35	25.15	283.8	0.145
99	9.05	33.28	4.81	75	9.98	32.95	5.79	25.38	262.4	0.214
153	8.36	33.68	3.47	100	9.02	33.29	4.70	25.80	222.9	0.274
201	7.75	33.93	2.47	150	8.38	33.66	3.50	26.19	186.7	0.377
297	6.69	34.04	2.09	200	7.75	33.92	2.48	26.48	159.1	0.463
396	6.11	34.11	1.05	250	7.13	34.00	2.23	26.64	145.2	0.540
490	5.41a)	34.16	0.75	300	6.65	34.04	2.06	26.73	136.6	0.610
588	4.83	34.20	0.54	400	6.07	34.11	1.02	26.87	125.0	0.740
781	4.18	34.33	0.37	500	5.34	34.16	0.72	26.99	113.6	0.860
973	3.66	34.40	0.40	600	4.80	34.21	0.53	27.09	104.3	0.969
1175	3.16	34.40	0.54	700	4.45	34.28	0.43	27.19	95.9	1.069
				800	4.12	34.34	0.38	27.27	88.5	1.161
				1000	3.59	34.40	0.40	27.37	79.7	1.329

40.80 BLACK DOUGLAS; April 15, 1950; 0742 GCT; 40°23'N, 127°40'W; sounding, 850 fm; wind 220°, force 3; weather, overcast; sea, very rough; wire angle, 16°.

0	10.91	32.68	5.74	0	10.91	32.68	5.74	25.00	296.8	0.000
10	10.91	32.70	5.68	10	10.91	32.70	5.68	25.02	295.1	0.030
29	10.66	32.70	5.66	20	10.85	32.71	5.66	25.04	293.4	0.059
48	9.05	32.57	5.58	30	10.60	32.70	5.65	25.08	290.2	0.088
72	8.77	32.70	5.74	50	9.00	32.57	5.60	25.24	274.8	0.145
95	8.09	33.19	4.47	75	8.75	32.73	5.70	25.40	260.0	0.212
147	7.68	33.71	3.29	100	8.00	33.26	4.35	25.93	210.1	0.270
193	7.45	33.96	2.24	150	7.67	33.75	3.20	26.36	169.8	0.365
284	6.44	34.04	1.42	200	7.40	33.97	2.15	26.58	150.2	0.445
378	5.76	34.09	0.95	250	6.75	34.02	1.65	26.70	138.7	0.518
468	5.28	34.13	0.62	300	6.30	34.05	1.34	26.79	131.2	0.585
562	4.93	34.20	0.47	400	5.63	34.10	0.86	26.91	120.4	0.710
749	4.22	34.40	0.30	500	5.15	34.15	0.55	27.01	112.0	0.827
936	3.73	34.38	0.46	600	4.77	34.24	0.43	27.12	101.8	0.934
1134	3.04	34.49	0.68	700	4.40	34.36	0.34	27.26	89.3	1.029
				800	4.10	34.40	0.31	27.32	83.7	1.116
				1000	3.50	34.41	0.55	27.39	77.9	1.278

40.90 BLACK DOUGLAS; April 14, 1950; 2359 GCT; 40°02'N, 128°25'W; sounding, 2,460 fm; wind 230°, force 3; weather, cloudy; sea, very rough; wire angle, 7°.

0	9.98	32.59	6.56	0	9.98	32.59	6.56	25.10	288.1	0.000
10	9.92	32.61	6.60	10	9.92	32.61	6.60	25.12	285.9	0.029
25	9.56	32.59	6.54	20	9.69	32.60	6.57	25.15	282.8	0.057
55	8.65	32.61	6.52	30	9.44	32.59	6.54	25.19	279.9	0.085
79	7.79	32.79	5.98	50	8.82	32.60	6.53	25.29	270.1	0.140
109	8.25	33.53	3.97	75	7.81	32.72	6.15	25.53	247.2	0.205
162	7.45	33.86	2.88	100	8.22	33.42	4.40	26.02	201.3	0.261
215	6.94	33.96	2.45	150	7.58	33.80	3.05	26.41	164.9	0.353
319	6.16	33.98	1.50	200	7.05	33.95	2.57	26.61	147.1	0.430
426	5.29	34.09	0.94	250	6.64	33.97	2.14	26.68	140.9	0.503
529	4.85b)	34.18	0.58	300	6.32	33.98	1.69	26.73	136.7	0.572
632	4.43	34.27	0.44	400	5.45	34.06	1.02	26.90	121.3	0.701
834	3.80	34.36	0.38	500	4.96	34.16	0.65	27.04	108.8	0.816
1039	3.34	34.45	0.49	600	4.55	34.25	0.48	27.16	98.4	0.920
1239	2.96	34.27r	0.66	700	4.21	34.31	0.40	27.24	90.9	1.014
				800	3.90	34.34	0.38	27.29	86.0	1.103
				1000	3.40	34.44	0.46	27.42	74.5	1.263

a) Mean value of 5.19 and 5.63°C.

b) Alternate value, 5.17°C, not used in interpolation.

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

BLACK DOUGLAS; April 14, 1950; 1746 GCT; 39°42'N, 129°10'W; sounding, 2,520 fm; wind, 240°, force 2; weather, overcast; sea, very rough; wire angle, 26°. 40.100

0	11.18	32.70	5.25	0	11.18	32.70	5.25	24.98	299.1	0.000
9	11.16	32.75	4.95	10	11.15	32.75	4.96	25.03	294.8	0.030
23	10.93	32.70	5.09	20	11.02	32.71	5.10	25.01	296.2	0.059
45	10.53	32.72	4.81	30	10.76	32.70	5.05	25.05	292.6	0.089
68	10.08	32.72	5.23	50	10.44	32.72	4.85	25.12	286.5	0.146
89	9.19	32.59	5.07	75	9.89	32.68	5.20	25.22	277.8	0.217
136	8.00	32.95	3.46	100	8.80	32.65	4.75	25.33	266.9	0.285
178	7.45	33.46	3.77	150	7.78	33.10	3.47	25.84	219.5	0.407
257	7.18	33.93	3.55	200	7.39	33.63	3.81	26.31	175.4	0.506
336	6.06	34.00	2.34	250	7.22	33.91	3.61	26.55	153.1	0.587
408	5.18	33.98	1.37	300	6.79	33.98	2.97	26.67	142.8	0.662
487	4.80	34.02	0.95	400	5.25	33.98	1.45	26.86	124.7	0.796
650	4.25	34.25	1.20r	500	4.76	34.03	(0.89)	26.96	116.2	0.916
823	3.84	34.31	0.27	600	4.38	34.18	(0.58)	27.12	101.5	1.025
1015	3.44	34.43	0.38	700	4.12	34.29	(0.38)	27.23	91.4	1.121
				800	3.89	34.31	(0.30)	27.27	88.1	1.211
				1000	3.48	34.42	0.35	27.40	76.8	1.376

BLACK DOUGLAS; April 14, 1950; 1029 GCT; 39°23'N, 129°55'W; sounding, 2,460 fm; wind, 280°, force 3; weather, overcast; sea, high; wire angle, 9°. 40.110

0	11.81	32.74	6.55	0	11.81	32.74	6.55	24.89	307.1	0.000
10	11.79	32.74	6.65	10	11.79	32.74	6.65	24.90	306.7	0.031
25	11.80	32.72	6.65	20	11.78	32.73	6.65	24.89	307.7	0.061
49	11.69	32.72	7.21	30	11.78	32.72	6.67	24.88	308.9	0.092
73	10.98	32.66	-	50	11.64	32.72	7.20	24.91	306.8	0.154
97	10.35	32.72	6.06	75	10.94	32.66	6.65	24.98	300.0	0.230
149	8.49	33.19	4.98	100	10.27	32.73	6.02	25.16	283.8	0.303
196	7.96	33.66	3.96	150	8.86	33.23	4.93	25.78	225.6	0.430
290	7.07	33.96	2.67	200	7.93	33.67	3.92	26.26	180.3	0.532
389	6.02	34.00	1.70	250	7.41	33.88	3.18	26.50	158.1	0.616
484	5.37a)	34.06	1.05	300	6.98	33.97	2.55	26.63	146.3	0.693
583	4.87	34.08	0.64	400	5.93	34.00	1.62	26.79	131.5	0.831
778	4.15	34.30	0.43	500	5.29	34.07	0.97	26.93	119.5	0.956
972	3.65	34.38	0.41	600	4.81	34.09	0.60	27.00	113.3	1.073
1172	3.18	34.43	0.61	700	4.42	34.19	0.48	27.12	102.4	1.180
				800	4.09	34.32	0.41	27.26	89.5	1.276
				1000	3.58	34.39	0.43	27.37	80.2	1.446

BLACK DOUGLAS; April 16, 1950; 1253 GCT; 40°48'N, 124°57'W; sounding, 1,540 fm; wind, 320°, force 1; weather, fog; sea, moderate; wire angle, 5°. 43.50

0	10.77	32.16	6.67	0	10.77	32.16	6.67	24.63	332.0	0.000
10	10.62	32.20	6.70	10	10.62	32.20	6.70	24.69	326.9	0.033
25	9.97	32.48	6.37	20	10.02	32.43	6.46	24.96	300.7	0.064
50	9.29	32.59	6.40	30	9.70	32.51	6.37	25.08	289.7	0.094
75	8.98	33.23	4.50	50	9.29	32.59	6.40	25.21	277.9	0.151
99	8.55	33.58	3.61	75	8.98	33.23	4.50	25.76	226.4	0.214
153	7.58	33.89	2.44	100	8.53	33.59	3.53	26.11	193.3	0.266
202	7.16	33.93	2.08	150	7.62	33.88	2.48	26.47	159.5	0.354
300	6.75	33.89	2.02	200	7.17	33.93	2.09	26.58	150.1	0.432
402	6.02	34.09	1.15	250	6.98	33.92	2.04	26.59	149.1	0.507
498	5.30	34.16	0.76	300	6.75	33.89	2.02	26.60	149.0	0.581
598	5.02b)	34.25	0.57	400	6.03	34.09	1.20	26.85	126.2	0.718
795	4.23	34.34	0.43	500	5.28	34.16	0.76	27.00	112.7	0.838
989	3.68	34.43	0.48	600	5.02	34.25	0.56	27.10	103.9	0.946
1191	3.24	34.47	0.65	700	4.61	34.32	0.47	27.20	94.9	1.046
				800	4.22	34.34	0.42	27.26	89.8	1.138
				1000	3.65	34.44	0.49	27.40	77.4	1.306

a) Alternate value, 5.18°C, not used in interpolation.
b) Alternate value, 5.10°C, not used in interpolation.

SIO

CCOFI
5004

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

43.60 BLACK DOUGLAS; April 16, 1950; 1951 GCT; 40°28'N, 125°43'W; sounding, 1,550 fm; wind, 290°, force 1; weather, fog; sea, moderate; wire angle, 3°.

0	10.95	32.63	6.01	0	10.95	32.63	6.01	24.96	300.6	0.000
10	10.52	32.59	6.03	10	10.52	32.59	6.03	25.00	296.9	0.030
25	10.08	32.59	6.27	20	10.15	32.59	6.24	25.07	290.8	0.059
50	9.91	32.61	6.17	30	10.02	32.59	6.28	25.09	289.2	0.088
74	8.90	32.63	6.18	50	9.91	32.61	6.17	25.12	286.2	0.146
99	7.99	33.06	5.34	75	8.77	32.63	6.17	25.32	267.6	0.215
153	7.86	33.76	3.04	100	7.96	33.22	5.30	25.91	212.4	0.275
201	7.48	33.89	2.52	150	7.88	33.74	3.09	26.33	173.4	0.372
299	6.54	34.00	1.71	200	7.50	33.89	2.54	26.50	157.6	0.454
401	5.62	34.05	1.10	250	7.03	33.96	2.08	26.62	147.0	0.531
497	5.15	34.09	0.72	300	6.51	34.00	1.69	26.72	137.7	0.601
599	4.79	34.20	0.53	400	5.62	34.05	1.12	26.87	124.0	0.732
797	4.12	34.33	0.43	500	5.13	34.09	0.72	26.96	116.1	0.852
992	3.62	34.41	0.51	600	4.78	34.20	0.52	27.09	104.8	0.963
1195	3.19	34.45	0.66	700	4.44	34.28	0.45	27.19	95.8	1.063
				800	4.11	34.33	0.43	27.26	89.2	1.155
				1000	3.60	34.41	0.52	27.38	79.1	1.324

47.55 BLACK DOUGLAS; April 17, 1950; 0647 GCT; 40°04'N, 124°55'W; sounding, 685 fm; wind, 320°, force 3; weather, clear; sea, rough; wire angle, 15°.

0	10.69	32.41	5.43	0	10.69	32.41	5.43	24.84	312.3	0.000
10	10.66	32.43	5.31	10	10.66	32.43	5.31	24.86	310.6	0.031
24	10.72	32.63	5.27	20	10.70	32.52	5.29	24.92	304.8	0.062
48	9.78	32.68	5.10	30	10.70	32.65	5.25	25.02	295.4	0.092
72	9.02	33.15	4.21	50	9.68	32.69	5.09	25.23	275.9	0.149
96	8.60	33.48	3.31	75	8.96	33.22	4.10	25.75	226.7	0.212
149	8.01	33.77	2.42	100	8.55	33.51	3.20	26.04	199.6	0.265
196	7.62	33.91	2.18	150	8.00	33.78	2.40	26.34	172.3	0.358
289	6.63	34.02	1.47	200	7.58	33.92	2.15	26.51	156.6	0.440
386	5.90	34.27r	0.89	250	7.05	33.98	1.81	26.63	145.7	0.516
478	5.41a)	34.14	0.63	300	6.52	34.03	1.39	26.74	136.0	0.586
575	5.02b)	34.20	0.55	400	5.82	34.09	0.84	26.88	123.5	0.716
667	4.78	34.31	0.40	500	5.31	34.16	0.57	26.99	113.3	0.834
765	4.44	34.34	0.40	600	4.96	34.22	0.51	27.09	105.4	0.944
955	3.78	34.40	0.43	700	4.67	34.33	0.40	27.21	94.7	1.044
				800	4.31	34.34	0.40	27.25	90.8	1.136
				1000	(3.60)	(34.41)	(0.45)	(27.38)	(79.1)	(1.307)

47.60 BLACK DOUGLAS; April 17, 1950; 0147 GCT; 39°54'N, 125°18'W; sounding, 1,500 fm; wind, 290°, force 2; weather, partly cloudy; sea, moderate; wire angle, 15°.

0	11.27	32.57	6.03	0	11.27	32.57	6.03	24.86	310.0	0.000
9	11.15	32.60	5.91	10	11.14	32.60	5.91	24.90	306.3	0.031
24	10.96	32.66	6.22	20	11.00	32.66	6.21	24.98	299.6	0.061
48	10.04	32.66	6.02	30	10.75	32.66	6.22	25.02	295.6	0.091
71	8.76	32.84	4.98	50	9.92	32.66	6.01	25.16	282.7	0.149
95	8.35	33.17	4.25	75	8.66	32.86	4.85	25.52	248.8	0.215
147	7.96	33.84	2.24	100	8.32	33.33	4.10	25.94	209.5	0.272
195	7.53	33.96	1.82	150	7.92	33.85	2.20	26.40	165.9	0.366
290	7.04	34.03	1.48	200	7.50	33.97	1.81	26.56	151.7	0.445
390	6.38	34.06	1.16	250	7.23	34.01	1.57	26.63	145.9	0.520
485	5.54	34.13	0.67	300	6.98	34.03	1.46	26.68	141.7	0.592
585	4.99c)	34.20	0.44	400	6.28	34.06	1.12	26.80	131.5	0.728
781	4.28	34.33	0.29	500	5.44	34.15	0.61	26.97	115.6	0.852
975	3.64	34.39	0.45	600	4.94	34.21	0.41	27.08	106.0	0.963
1177	3.20	34.45	0.62	700	4.56	34.28	0.32	27.18	97.2	1.064
				800	4.21	34.34	0.30	27.26	89.7	1.158
				1000	3.56	34.40	0.48	27.38	79.4	1.327

a) Alternate value, 5.55°C, not used in interpolation.
b) Alternate value, 4.96°C, not used in interpolation.
c) Alternate value, 5.05°C, not used in interpolation.

BLACK DOUGLAS; April 10 1950; 2123 GCT; 39°30'N, 124°30'W; sounding, 1,100 fm; wind, 120°, force 3; weather, partly cloudy; sea, moderate; wire angle, 5°. 50.55

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
0	11.54	32.73	5.80		0	11.54	32.73	5.80		24.93	303.4	0.000
10	11.40	32.73	4.89		10	11.40	32.73	4.89		24.96	301.3	0.030
25	11.13	32.71	5.60		20	11.18	32.72	5.45		24.99	298.2	0.060
50	11.04	32.72	5.75		30	11.10	32.71	5.67		25.00	297.6	0.090
74	9.43	32.80	5.37		50	11.04	32.72	5.75		25.02	296.2	0.149
98	9.23	33.32	4.32		75	9.38	32.82	5.32		25.37	262.7	0.219
152	8.06	33.69	3.24		100	9.19	33.34	4.27		25.81	221.7	0.280
201	7.41	33.90	2.84		150	8.11	33.68	3.26		26.24	181.3	0.381
297	6.44	34.00	1.91		200	7.44	33.89	2.85		26.51	156.9	0.465
398	5.62	34.05	1.11		250	6.89	33.97	2.41		26.65	144.2	0.541
494	5.02	34.13	0.74		300	6.41	34.00	1.88		26.73	136.4	0.610
595	4.79	34.22	0.40		400	5.61	34.05	1.10		26.87	124.0	0.741
794	4.16	34.34	0.30		500	5.00	34.13	0.72		27.01	111.5	0.858
990	3.76	34.40	0.43		600	4.77	34.22	0.39		27.11	103.2	0.966
1193	3.24	34.47	0.76		700	4.39	34.29	0.31		27.20	94.3	1.064
					800	4.14	34.34	0.30		27.27	88.7	1.156
					1000	3.75	34.40	0.44		27.36	81.6	1.326

BLACK DOUGLAS; April 11, 1950; 0203 GCT; 39°20'N, 124°52'W; sounding, 1,600 fm; wind, 140°, force 3; weather, partly cloudy; sea, moderate; wire angle, 17°. 50.60

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
0	11.77	32.80	5.58		0	11.77	32.80	5.58		24.95	302.0	0.000
10	11.74	32.83	6.16		10	11.74	32.83	6.16		24.98	299.5	0.030
24	11.40	32.84	6.23		20	11.49	32.84	6.22		25.03	294.6	0.060
48	11.35	32.83	6.19		30	11.38	32.84	6.22		25.04	293.6	0.089
72	10.54a)	32.90	5.96		50	11.34	32.83	6.18		25.05	293.2	0.148
95	9.61	33.12	5.16		75	10.39	32.91	5.91		25.28	272.1	0.218
145	8.23	33.57	3.65		100	9.43	33.18	4.86		25.65	237.4	0.282
191	8.02	33.81	2.84		150	8.18	33.61	3.56		26.18	187.4	0.389
277	6.69	33.99	2.07		200	7.94	33.84	2.74		26.39	167.8	0.477
369	5.88	34.05	1.38		250	7.06	33.95	2.28		26.61	148.1	0.556
456	5.26	34.11	0.95		300	6.45	34.01	1.90		26.74	136.1	0.627
550	4.96	34.16	0.58		400	5.61	34.07	1.20		26.89	122.4	0.756
736	4.34	34.25	0.32		500	5.09	34.14	0.76		27.01	111.8	0.874
923	3.82	34.38	0.42		600	4.79	34.19	0.44		27.08	105.6	0.982
1121	3.28	34.43	0.62		700	4.44	34.24	0.34		27.16	98.8	1.084
					800	4.15	34.29	0.35		27.23	92.5	1.180
					1000	3.60	34.41	0.50		27.38	79.1	1.352

BLACK DOUGLAS; April 11, 1950; 1103 GCT; 39°00'N, 125°36.5'W; sounding, 2,100 fm; wind, 140°, force 4; weather, clear; sea, rough; wire angle, 15°. 50.70

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
0	11.74	32.84	5.59		0	11.74	32.84	5.59		24.98	298.6	0.000
10	11.74	32.83	5.70		10	11.74	32.83	5.70		24.98	299.3	0.030
24	11.72	32.84	5.19		20	11.70	32.84	5.22		24.99	298.4	0.060
48	11.54	32.84	5.62		30	11.67	32.84	5.25		25.00	298.1	0.090
72	10.75	32.89	5.45		50	11.45	32.84	5.63		25.04	294.5	0.149
96	10.23	33.22	4.14		75	10.67	32.90	5.39		25.22	277.4	0.220
148	9.10	33.58	2.93		100	10.15	33.27	3.80		25.60	242.1	0.285
194	7.62	33.78	3.36r		150	9.04	33.61	(2.90)		26.04	200.5	0.396
285	6.51	33.96	0.42r		200	7.52	33.79	(2.50)		26.42	165.5	0.487
378	5.75	33.97	1.45		250	6.87	33.92	(2.22)		26.61	147.8	0.566
467	5.27	34.09	0.81		300	6.37	33.96	(1.91)		26.71	138.7	0.637
557	4.78	34.18	0.55		400	5.63	33.98	1.28		26.81	129.5	0.772
738	4.18	34.31	0.27		500	5.07	34.13	0.70		27.00	112.3	0.893
921	3.71	34.40	0.45		600	4.60	34.22	0.44		27.13	101.1	0.999
1117	3.39	34.47	0.67		700	4.28	34.29	0.28		27.21	93.2	1.096
					800	4.01	34.34	0.30		27.28	87.3	1.187
					1000	3.57	34.43	0.56		27.40	77.2	1.351

a) Mean value of 10.60 and 10.47°C.

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

50.80 BLACK DOUGLAS; April 11, 1950; 1909 GCT; 38°40'N, 126°21'W; sounding, 2,360 fm; wind, 160°, force 5; weather, overcast; sea, very rough; wire angle, 27°.

0	10.85	32.70	3.09r	0	10.85	32.70	(6.34)	25.04	293.5	0.000
9	10.83	32.68	6.34	10	10.83	32.68	6.34	25.02	295.1	0.029
21	10.80	32.70	6.35	20	10.81	32.70	6.34	25.04	293.3	0.059
46	10.21	32.68	6.39	30	10.65	32.70	6.37	25.07	290.9	0.088
66	9.44	32.70	6.22	50	10.12	32.68	6.38	25.15	283.9	0.146
88	8.29	32.84	5.81	75	9.00	32.73	6.11	25.36	263.7	0.214
129	7.76	33.53	4.31	100	7.97	33.02	5.05	25.75	227.6	0.275
168	7.62	33.82	3.98	150	7.69	33.76	4.09	26.37	169.3	0.375
246	6.81	33.93	3.20	200	7.35	33.87	3.78	26.50	157.0	0.456
327	6.06	34.03	1.72	250	6.77	33.94	3.15	26.64	144.9	0.532
407	5.26	34.03	1.30	300	6.31	34.01	2.22	26.75	134.4	0.601
489	5.00	34.16	0.84	400	5.29	34.03	1.35	26.90	121.3	0.729
646	4.45	34.23	0.41	500	4.97	34.16	0.78	27.04	108.9	0.844
812	3.94	34.36	0.37	600	4.61	34.21	0.48	27.12	102.2	0.950
992	3.48	34.42	0.45	700	4.27	34.27	0.39	27.20	94.6	1.048
				800	3.98	34.35	0.37	27.30	86.1	1.138
				1000	(3.46)	(34.42)	(0.45)	(27.40)	(76.7)	(1.302)

50.90 BLACK DOUGLAS; April 12, 1950; 0522 GCT; 38°20'N, 127°05'W; sounding, 2,460 fm; wind, 180°, force 5; weather, overcast; sea, very rough; wire angle, 28°.

0	11.92	32.94	5.78	0	11.92	32.94	5.78	25.03	294.2	0.000
8	11.89	32.95	5.70	10	11.89	32.95	5.71	25.04	293.3	0.029
26	11.90	32.94	5.81	20	11.90	32.95	5.74	25.04	293.6	0.059
52	11.15	32.97	5.48	30	11.83	32.94	5.73	25.05	293.3	0.088
78	11.93r	33.33	4.57	50	11.12	32.97	5.53	25.20	279.4	0.145
104	9.33	33.55	3.64	75	10.50	33.27	4.65	25.54	247.5	0.211
155	8.12	33.82	2.82	100	9.60	33.53	3.74	25.89	214.1	0.269
204	7.79	34.04	2.21	150	8.15	33.80	2.90	26.33	172.8	0.366
302	7.07	34.09	1.43	200	7.80	34.02	2.26	26.56	152.4	0.447
393	6.06	34.13	0.95	250	7.50	34.08	1.82	26.65	144.3	0.521
488	5.40	34.13	0.63	300	7.09	34.09	1.45	26.71	138.7	0.592
581	5.07	34.25	0.41	400	5.98	34.13	0.93	26.89	122.4	0.722
770	4.40	34.34	0.37	500	5.35	34.13	0.59	26.97	116.0	0.841
958	3.83	34.45	0.43	600	5.00	34.27	0.40	27.12	102.1	0.950
1156	3.34	34.49	0.54	700	4.63	34.32	0.39	27.20	95.1	1.049
				800	4.30	34.35	0.38	27.26	89.8	1.141
				1000	3.72	34.46	0.45	27.41	76.8	1.309

50.100 BLACK DOUGLAS; April 12, 1950; 1325 GCT; 38°00'N, 127°49'W; sounding, 2,500 fm; wind, 180°, force 3; weather, partly cloudy; sea, rough; wire angle, 2°.

0	11.49	33.04r	5.92	0	11.49	(32.83)	5.92	(25.02)	(295.0)	(0.000)
10	11.46	32.83	6.26	10	11.46	32.83	6.26	25.03	294.5	0.029
25	11.51	32.83	6.21	20	11.48	32.83	6.22	25.02	295.2	0.059
50	10.38	32.81	6.12	30	11.49	32.82	6.20	25.01	296.4	0.090
74	8.66	32.92	5.66	50	10.38	32.81	6.12	25.20	278.8	0.146
98	8.29	33.21	4.97	75	8.64	32.92	5.55	25.57	244.2	0.211
151	7.99	33.75	3.32	100	8.28	33.22	4.90	25.86	217.0	0.269
199	7.66	33.96	2.59	150	8.00	33.74	3.35	26.31	175.2	0.368
296	6.63	34.04	2.00	200	7.64	33.96	2.56	26.53	154.5	0.450
396	5.68	34.07	1.23	250	7.15	34.02	2.23	26.65	144.0	0.525
493	5.05	34.14	0.91	300	6.61	34.04	1.97	26.74	136.1	0.595
594	4.81	34.25	0.46	400	5.64	34.07	1.20	26.88	122.7	0.724
793	4.04	34.38	0.38	500	5.03	34.15	0.89	27.01	111.3	0.841
988	3.62	34.47	0.56	600	4.79	34.26	0.45	27.14	100.5	0.947
1190	3.20	34.54	0.74	700	4.37	34.33	0.40	27.24	91.2	1.043
				800	4.01	34.39	0.40	27.32	83.7	1.130
				1000	3.59	34.48	0.58	27.44	73.8	1.288

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

BLACK DOUGLAS; April 12, 1950; 2047 GCT; 37°40'N, 128°33'W; sounding, 2,600 fm; wind, 260°, force 3; weather, cloudy; sea, high; wire angle, 14°. 50.110

0	12.20	32.83	4.90	0	12.20	32.83	4.90	24.89	307.5	0.000
10	12.04	32.86	5.03	10	12.04	32.86	5.03	24.94	302.7	0.030
24	12.12	32.95	5.49	20	12.09	32.92	5.31	24.98	299.4	0.061
48	11.44	33.06	5.64	30	12.09	32.99	5.57	25.03	294.5	0.090
72	10.19	33.26	4.92	50	11.35	33.07	5.64	25.23	275.8	0.147
95	9.57	33.45	3.76	75	10.10	33.29	4.75	25.62	239.4	0.212
148	7.98	33.74	2.90	100	9.45	33.49	3.63	25.89	214.6	0.268
195	7.42	33.91	2.58	150	7.94	33.75	2.88	26.32	173.6	0.366
287	6.48	33.98	1.69	200	7.36	33.92	2.55	26.54	153.4	0.447
385	5.61	34.01	1.20	250	6.84	33.96	2.09	26.64	144.5	0.522
478	5.17	34.09	0.79	300	6.35	33.98	1.58	26.73	137.0	0.592
575	4.78	34.16	0.43	400	5.53	34.02	1.14	26.86	125.2	0.723
766	4.24	34.32	0.39	500	5.08	34.11	0.67	26.98	114.0	0.842
954	3.73	34.42	0.41	600	4.70	34.18	0.41	27.08	105.3	0.952
1151	3.20	34.47	0.62	700	4.41	34.26	0.40	27.18	96.9	1.053
				800	4.14	34.35	0.40	27.28	87.9	1.145
				1000	3.60	34.44	0.43	27.40	76.9	1.311

BLACK DOUGLAS; April 13, 1950; 0415 GCT; 37°20'N, 129°16.5'W; sounding, 2,600 fm; wind, 260°, force 4; weather, partly cloudy; sea, high; wire angle, 28°. 50.120

0	11.95	32.75	5.70a)	0	11.95	32.75	(6.30)	24.87	308.9	0.000
9	11.95	32.73	6.22	10	11.95	32.73	6.21	24.86	310.6	0.031
22	11.95	32.72	6.09	20	11.95	32.72	6.11	24.85	311.4	0.062
48	11.77	32.72	5.95	30	11.95	32.72	6.02	24.85	311.7	0.093
69	10.70	32.70	6.08	50	11.75	32.72	5.96	24.89	308.7	0.155
94	9.64	32.66	5.94	75	10.40	32.69	6.07	25.10	289.4	0.230
139	8.58	33.20	4.95	100	9.41	32.66	5.80	25.25	275.3	0.301
184	7.67	33.62	4.09	150	8.30	33.36	4.58	25.96	207.7	0.422
270	6.66	33.91	2.94	200	7.41	33.69	3.90	26.35	171.3	0.516
361	6.05	34.04	1.37	250	6.82	33.86	3.25	26.57	151.5	0.596
373p	5.90	34.05	1.23	300	6.40	33.97	2.45	26.71	138.4	0.669
450	5.42	34.04	0.93	400	5.73	34.05	1.01	26.86	125.5	0.800
539	4.92	34.13	0.67	500	5.13	34.09	0.82	26.96	116.1	0.922
590p	4.70	34.17	0.50	600	4.67	34.18	0.49	27.09	104.9	1.033
890p	3.96	34.38	0.40	700	4.37	34.26	0.44	27.18	96.5	1.133
				800	4.13	34.32	0.42	27.26	90.1	1.227
				1000	(3.75)	(34.43)		(27.38)	(79.3)	(1.396)

BLACK DOUGLAS; April 13, 1950; 1237 GCT; 37°00'N, 130°00'W; sounding, 2,720 fm; wind, 300°, force 5; weather, clear; sea, high; wire angle, 13°. 50.130

0	12.60	32.78	5.52	0	12.60	32.78	5.52	24.78	318.4	0.000
10	12.72	32.78	4.66r	10	12.72	32.78	5.42	24.75	320.6	0.032
24	12.67	32.77	5.25	20	12.70	32.77	5.30	24.75	321.5	0.064
48	12.38	32.76	5.07	30	12.61	32.77	5.19	24.76	320.2	0.096
72	11.52	32.72	5.31	50	12.33	32.76	5.08	24.81	316.2	0.160
96	11.11	32.73	4.86	75	11.45	32.72	5.30	24.94	304.1	0.237
147	8.73	33.06	4.21	100	10.98	32.74	4.80	25.04	295.0	0.312
193	8.09	33.52	3.43	150	8.68	33.10	4.18	25.70	232.5	0.444
284	7.01	33.93	2.13	200	7.99	33.57	3.25	26.18	188.4	0.550
379	5.79	33.96	1.79	250	7.40	33.82	2.37	26.46	162.4	0.637
470	4.91	33.98	1.27	300	6.78	33.94	2.06	26.64	145.7	0.714
567	4.63	34.11	0.44	400	5.53	33.96	1.70	26.81	129.7	0.851
757	4.06	34.23	0.32	500	4.79	34.02	1.00	26.95	117.1	0.975
947	3.65	34.37	0.30	600	4.53	34.13	0.38	27.06	107.1	1.087
1147	3.22	34.45	0.51	700	4.22	34.20	0.35	27.15	99.3	1.190
				800	3.96	34.26	0.32	27.22	92.6	1.286
				1000	3.71	34.40	0.32	27.38	79.0	1.457

a) Alternate values, 3.07 and 6.84 ml/L; all three values rejected.

SIO

CCOFI
5004

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

55.60 BLACK DOUGLAS; April 10, 1950; 1252 GCT; 38°28.5'N, 124°14'W; sounding, 1,930 fm; wind, calm; weather, partly cloudy; sea, moderate; wire angle, 3°.

0	11.14	32.75	6.06	0	11.14	32.75	6.06	25.02	294.9	0.000
10	11.15	32.74	6.04	10	11.15	32.74	6.04	25.01	296.0	0.030
25	11.00	32.74	6.10	20	11.06	32.74	6.08	25.03	294.8	0.059
50	10.93	32.75	6.09	30	10.98	32.74	6.10	25.04	293.6	0.088
75	10.60	32.76	6.09	50	10.93	32.75	6.09	25.06	292.6	0.147
99	9.44	33.08	5.06	75	10.60	32.76	6.09	25.12	286.7	0.220
153	8.28	33.64	3.51	100	9.38	33.17	4.98	25.65	237.2	0.285
201	7.64	33.87	2.90	150	8.30	33.62	3.55	26.17	188.5	0.392
298	6.52	33.98	2.10	200	7.65	33.87	2.92	26.46	161.4	0.479
398	5.64	34.05	1.19	250	7.04	33.94	2.50	26.60	148.5	0.556
495	5.18	34.17	0.69	300	6.51	33.98	2.08	26.70	139.2	0.628
597	4.81	34.20	0.52	400	5.62	34.05	1.17	26.87	124.0	0.760
797	4.17	34.32	0.31	500	5.15	34.17	0.68	27.02	110.4	0.877
993	3.73	34.40	0.56	600	4.80	34.20	0.52	27.09	105.0	0.985
1196	3.19	34.47	0.74	700	4.48	34.25	0.37	27.16	98.3	1.086
				800	4.17	34.32	0.31	27.25	90.6	1.181
				1000	3.17	34.40	0.58	27.36	81.2	1.353

60.60 BLACK DOUGLAS; April 9, 1950; 2106 GCT; 37°35'N, 123°40'W; sounding, 1,900 fm; wind, 330°, force 3; weather, partly cloudy; sea, rough; wire angle, 17°.

0	10.58	32.70	6.88	0	10.58	32.70	6.88	25.08	289.2	0.000
10	10.32	32.70	6.48	10	10.32	32.70	6.48	25.13	285.0	0.029
24	10.06	32.81	6.26	20	10.10	32.73	6.33	25.19	279.7	0.057
48	9.06	33.00	5.55	30	9.96	32.86	6.10	25.31	268.2	0.084
71	8.52	33.30	4.79	50	9.00	33.01	5.48	25.58	242.6	0.135
95	8.48	33.58	3.88	75	8.51	33.34	4.65	25.92	211.3	0.192
145	8.39	33.92	2.60	100	8.49	33.63	3.50	26.14	189.9	0.242
191	8.06	34.04	2.45	150	8.35	33.94	2.58	26.41	165.4	0.331
279	7.13	34.09	1.57	200	7.98	34.05	2.38	26.55	152.6	0.411
371	6.23	34.15	1.03	250	7.48	34.08	1.81	26.65	144.1	0.485
460	5.55	34.16	0.69	300	6.90	34.10	1.42	26.75	135.5	0.554
554	5.26	34.25	0.50	400	5.99	34.16	0.90	26.91	120.3	0.682
741	4.44	34.41	0.36	500	5.42	34.19	0.60	27.00	112.4	0.798
928	3.96	34.43	0.49	600	5.09	34.30	0.45	27.13	101.1	0.906
1129	3.47	34.48	0.69	700	4.62	34.39	0.37	27.26	89.8	1.002
				800	4.29	34.42	0.37	27.32	84.5	1.089
				1000	3.79	34.45	0.57	27.39	78.4	1.251

60.70 BLACK DOUGLAS; April 9, 1950; 1403 GCT; 37°17'N, 124°21'W; sounding, 2,240 fm; wind, 320°, force 5; weather, partly cloudy; sea, rough; wire angle, 11°.

0	11.70	33.01	6.33	0	11.70	33.01	6.33	25.12	285.4	0.000
10	11.68	32.94	6.18	10	11.68	32.94	6.18	25.07	290.5	0.029
25	11.69	32.99	6.22	20	11.69	32.97	6.20	25.09	288.5	0.058
49	11.51	33.08	6.23	30	11.67	33.01	6.23	25.13	285.5	0.086
74	10.04	33.28	5.25	50	11.50	33.09	6.23	25.22	277.3	0.143
98	9.25	33.62	3.89	75	10.03	33.30	5.15	25.64	237.4	0.207
151	8.77	33.95	2.72	100	9.22	33.64	3.88	26.04	200.0	0.262
198	8.06	34.00	2.21	150	8.76	33.94	2.75	26.35	171.5	0.355
289	6.76	34.01	2.02	200	8.04	34.00	2.18	26.50	157.4	0.436
385	5.86	34.05	1.23	250	7.25	34.01	2.06	26.63	146.1	0.513
478	5.35	34.18	0.74	300	6.64	34.01	1.97	26.71	138.7	0.583
577	5.09	34.34	0.40	400	5.75	34.07	1.15	26.97	124.1	0.715
774	4.39	34.36	0.38	500	5.28	34.21	0.62	27.04	109.0	0.832
970	3.86	34.51	0.46	600	5.02	34.35	0.40	27.18	96.7	0.934
1173	3.30	34.47	0.74	700	4.63	34.35	0.37	27.22	92.9	1.029
				800	4.33	34.38	0.38	27.28	88.0	1.120
				1000	3.76	34.51	0.49	27.44	73.6	1.282

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

60.80

BLACK DOUGLAS; April 9, 1950; 0619 GCT; 36°57'N, 125°04'W; sounding, 2,400 fm; wind, 270°, force 3; weather, clear; sea, rough; wire angle, 9°.

0	12.36	32.90	6.11	0	12.36	32.90	6.11	24.91	305.4	0.000
10	12.39	32.89	6.26	10	12.39	32.89	6.26	24.92	304.8	0.030
25	12.34	32.95	6.00	20	12.35	32.95	6.05	24.95	301.8	0.061
49	11.43	32.97	6.14	30	12.28	32.96	6.02	24.98	299.9	0.091
73	9.34	32.97	5.51	50	11.38	32.97	6.13	25.15	283.7	0.149
96	8.85	33.33	4.61	75	9.30	32.97	5.50	25.50	250.4	0.216
147	8.40	33.84	2.68	100	8.81	33.49	4.46	25.99	205.0	0.273
191	7.58	33.92	2.40	150	8.39	33.85	2.65	26.34	172.6	0.367
280	6.80	34.02	1.79	200	7.49	33.93	2.37	26.53	154.5	0.449
374	5.66	34.07	1.32	250	7.07	33.99	2.02	26.64	145.2	0.524
463	5.08	34.13	0.74	300	6.57	34.03	1.68	26.74	136.3	0.594
558	4.88	34.22	0.46	400	5.40	34.09	1.18	26.93	118.4	0.722
745	4.36	34.36	0.34	500	4.98	34.16	0.58	27.04	109.0	0.835
933	3.79	34.40	0.53	600	4.80	34.26	0.40	27.13	100.7	0.940
1135	3.43	34.49	0.75	700	4.52	34.33	0.34	27.22	93.0	1.037
				800	4.19	34.37	0.36	27.29	87.1	1.127
				1000	3.62	34.43	0.62	27.39	78.0	1.293

60.90

BLACK DOUGLAS; April 9, 1950; 0004 GCT; 36°37'N, 125°47'W; sounding, 2,480 fm; wind, 270°, force 5; weather, overcast; sea, very rough; wire angle, 22°.

0	12.43	32.95	5.49	0	12.43	32.95	5.49	24.94	303.0	0.000
10	12.47	32.95	5.43	10	12.47	32.95	5.43	24.93	303.6	0.030
23	12.43	32.97	5.56	20	12.45	32.97	5.55	24.95	302.2	0.061
51	11.31	32.97	5.39	30	12.35	32.97	5.55	24.97	300.7	0.091
74	10.00	33.12	4.28	50	11.50	32.97	5.42	25.13	285.8	0.149
102	9.21	33.40	4.13	75	10.00	33.13	4.27	25.51	249.6	0.216
151	-	33.78	2.59	100	9.30	33.37	4.14	25.82	221.3	0.275
200	7.50	33.95	2.26	150	8.31	33.77	2.60	26.28	177.6	0.375
296	6.46	34.04	1.39	200	7.50	33.95	2.26	26.55	153.1	0.457
395	5.83	34.15	0.77	250	6.88	34.01	1.81	26.68	141.1	0.531
492	5.15	34.20	0.60	300	6.44	34.04	1.36	26.76	133.8	0.600
589	4.67	34.27	0.43	400	5.79	34.15	0.75	26.93	118.5	0.726
784	4.21	34.40	0.36	500	5.12	34.20	0.58	27.05	107.9	0.839
987	3.68	34.47	0.53	600	4.64	34.28	0.41	27.17	97.3	0.942
1187	3.21	34.51	0.67	700	4.40	34.35	0.35	27.25	90.0	1.035
				800	4.17	34.41	0.37	27.32	83.9	1.122
				1000	3.64	34.47	0.55	27.42	75.2	1.282

60.100

BLACK DOUGLAS; April 8, 1950; 1547 GCT; 36°17'N, 126°30'W; sounding, 2,540 fm; wind, 270°, force 5; weather, partly cloudy; sea, very rough; wire angle, 19°.

0	12.07	32.94	6.47	0	12.07	32.94	6.47	25.00	297.2	0.000
10	12.09	32.94	6.18	10	12.09	32.94	6.18	24.99	297.7	0.030
24	12.07	32.94	6.24	20	12.07	32.94	6.20	25.00	297.6	0.059
52	11.31	32.97	6.19	30	12.05	32.95	6.25	25.01	296.8	0.089
76	10.16	33.21	5.41	50	11.50	32.97	6.20	25.13	285.8	0.147
104	8.99	33.58	3.73	75	10.25	33.12	5.67	25.46	254.5	0.215
156	-	33.89	2.63	100	9.17	33.55	5.60	25.98	205.7	0.272
207	7.50	34.02	2.21	150	8.20	33.86	2.70	26.37	169.2	0.366
308	6.48	34.11	1.36	200	7.57	34.01	2.25	26.58	149.9	0.446
414	5.56	34.14	0.79	250	7.06	34.07	1.83	26.70	139.1	0.518
515	5.22	34.22	0.50	300	6.57	34.11	1.42	26.80	130.3	0.585
617	4.68	34.23	0.41	400	5.66	34.14	0.86	26.94	117.9	0.709
818	4.08	34.36	0.34	500	5.28	34.21	0.52	27.04	109.1	0.823
1024	3.53	34.45	0.53	600	4.75	34.23	0.42	27.12	102.3	0.929
1224	3.16	34.49	0.75	700	4.40	34.27	0.36	27.19	96.0	1.028
				800	4.11	34.34	0.35	27.27	88.5	1.120
				1000	3.58	34.44	0.50	27.41	76.7	1.286

SIO

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

60.110 BLACK DOUGLAS; April 8, 1950; 0838 GCT; 25°57'N, 127°12'W; sounding, 2,610 fm; wind, 270°, force 4; weather, clear; sea, very rough; wire angle, 21°.

0	12.67	32.79	5.14	0	12.67	32.79	5.14	24.76	319.4	0.000
10	12.68	32.95	5.46	10	12.68	32.95	5.46	24.89	307.7	0.031
24	12.67	32.97	5.40	20	12.67	32.97	5.44	24.91	306.2	0.062
51	12.18	32.97	5.30	30	12.66	32.97	5.37	24.91	306.3	0.093
74	11.29	32.92	5.04	50	12.40	32.97	5.32	24.96	302.1	0.154
100	9.68	32.97	4.78	75	11.15	32.92	5.02	25.15	284.0	0.227
150	8.49	33.46	4.25	100	9.68	32.97	4.78	25.45	256.2	0.294
198	7.98	33.78	2.79	150	8.49	33.46	4.25	26.02	202.9	0.409
294	6.83	34.00	2.08	200	7.94	33.78	2.76	26.35	172.1	0.503
392	5.78	34.04	1.17	250	7.42	33.93	2.32	26.54	154.4	0.584
485	5.30	34.11	0.81	300	6.68	34.01	2.03	26.71	139.0	0.658
576	4.84	34.18	0.48	400	5.73	34.04	1.07	26.85	126.3	0.791
758	4.22	34.34	0.32	500	5.21	34.12	0.77	26.98	114.9	0.911
946	3.68	34.45	0.41	600	4.74	34.20	0.45	27.09	104.4	1.021
1137	3.32	34.49	0.54	700	4.38	34.29	0.36	27.21	94.2	1.120
				800	4.07	34.37	0.34	27.30	85.7	1.210
				1000	3.58	34.47	0.48	27.43	74.5	1.370

60.120 BLACK DOUGLAS; April 8, 1950; 0156 GCT; 35°37'N, 127°54.5'W; sounding, 2,420 fm; wind, 270°, force 5; weather, partly cloudy; sea, high; wire angle, 22°.

0	13.70	33.01	5.98	0	13.70	33.01	5.98	24.73	322.4	0.000
9	13.70	32.97	5.78	10	13.70	32.97	5.78	24.70	325.5	0.032
28	13.72	33.02	5.83	20	13.70	33.02	5.83	24.74	322.1	0.065
55	-	32.99	5.72	30	(13.72)	33.02	5.86	(24.74)	(321.8)	(0.097)
82	13.76	33.10	5.70	50	(13.72)	32.99	5.74	(24.72)	(325.2)	(0.162)
110	12.87	33.24	5.62	75	(13.75)	33.06	5.71	(24.76)	(321.5)	(0.242)
163	10.26	33.36	5.25	100	13.25	33.19	5.67	24.96	302.9	(0.320)
216	8.06	33.61	4.33	150	10.79	33.34	5.36	25.54	248.4	(0.458)
322	6.82	33.95	3.00	200	8.62	33.51	4.65	26.03	202.1	(0.571)
425	5.55	34.00	1.80	250	7.55	33.79	3.84	26.41	166.7	(0.663)
533	4.96	34.06	0.97	300	7.03	33.93	3.26	26.59	149.9	(0.742)
636	4.54	34.18	0.54	400	5.78	33.99	2.05	26.81	130.3	(0.882)
849	4.00	34.31	0.38	500	5.12	34.03	1.18	26.92	120.5	(1.008)
1055	3.48	34.41	0.60	600	4.67	34.14	0.67	27.05	107.9	(1.122)
1259	3.00	34.46	0.77	700	4.37	34.23	0.43	27.16	98.6	(1.225)
				800	4.11	34.29	0.38	27.23	92.1	(1.320)
				1000	3.60	34.38	0.49	27.37	81.3	(1.494)

60.130 BLACK DOUGLAS; April 7, 1950; 1803 GCT; 35°17'N, 128°37'W; sounding, 2,590 fm; wind, 270°, force 6; weather, partly cloudy; sea, high; wire angle, 10°.

0	13.84	33.04	5.36	0	13.84	33.04	5.36	24.73	323.0	0.000
10	13.84	33.04	5.36	10	13.84	33.04	5.36	24.73	323.3	0.032
25	13.86	33.04	5.28	20	13.85	33.04	5.29	24.73	323.6	0.065
54	13.88	33.04	5.12	30	13.86	33.04	5.26	24.73	323.9	0.097
78	14.04	33.15	4.76	50	13.89	33.04	5.16	24.72	324.9	0.162
107	11.30	32.94	4.62	75	14.01	33.14	4.78	24.77	321.0	0.243
160	10.14	33.46	4.54	100	11.70	32.96	4.66	25.08	291.2	0.319
213	8.02	33.72	4.19	150	10.45	33.36	4.55	25.62	241.4	0.452
319	7.10	34.00	1.90	200	8.28	33.68	4.31	26.22	184.4	0.559
428	6.16	34.08	1.15	250	7.57	33.83	3.60	26.44	163.9	0.646
533	5.51	34.14	0.71	300	7.20	33.97	2.30	26.60	149.1	0.724
637	4.98	34.23	0.46	400	6.37	34.07	1.19	26.79	132.0	0.864
840	4.26	34.34	0.35	500	5.68	34.11	0.88	26.91	121.5	0.991
1047	3.60	34.43	0.48	600	5.15	34.20	0.52	27.05	109.3	1.106
1248	3.12	34.48	0.50	700	4.74	34.27	0.39	27.15	100.0	1.211
				800	4.39	34.32	0.39	27.23	92.9	1.308
				1000	3.71	34.41	0.43	27.37	80.5	1.481

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OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
BLACK DOUGLAS; April 10, 1950; 0228 GCT; 37°37'N, 123°07.5'W; sounding, 520 fm; wind, 310°, force 3; weather, partly cloudy; sea, rough; wire angle, 10°.													61.55
0	10.87	33.03	5.37		0	10.87	33.03	5.37		25.29	269.7	0.000	
10	10.81	33.03	5.68		10	10.81	33.03	5.68		25.30	269.0	0.027	
25	10.15	33.13	5.39		20	10.35	33.05	5.55		25.39	260.0	0.053	
49	9.06	33.48	3.88		30	9.94	33.21	5.26		25.59	241.8	0.078	
74	8.52	33.75	2.79		50	9.01	33.51	3.79		25.97	205.7	0.123	
98	8.32	33.86	1.47r		75	8.52	33.76	2.79		26.24	180.1	0.171	
151	7.75	33.96	2.21		100	8.30	33.86	2.52		26.36	169.7	0.215	
200	7.48	34.04	1.87		150	7.76	33.96	2.22		26.51	155.4	0.296	
249	7.26	34.07	1.44		200	7.48	34.04	1.87		26.62	146.1	0.372	
297	7.02	34.13	1.25		250	7.25	34.07	1.43		26.68	141.6	0.443	
399	6.26	34.15	1.02		300	7.00	34.13	1.24		26.76	134.5	0.513	
496	5.70	34.23	0.56		400	6.24	34.15	1.01		26.87	124.3	0.642	
598	5.28	34.27	0.56		500	5.69	34.23	0.56		27.00	113.2	0.761	
696	4.94	34.33	0.44		600	5.27	34.27	0.56		27.09	105.6	0.870	
800	4.54	34.38	0.38		700	4.92	34.33	0.43		27.18	97.8	0.972	
					800	4.54	34.38	0.38		27.26	90.5	1.066	
BLACK DOUGLAS; April 4, 1950; 0728 GCT; 36°45'N, 123°00'W; sounding, 1,630 fm; wind, 320°, force 5; weather, clear; sea, high; wire angle, 32°.													65.60
0	10.83	32.83	6.13		0	10.83	32.83	6.13		25.14	283.4	0.000	
8	10.80	32.84	6.00		10	10.80	32.84	5.98		25.15	282.9	0.028	
21	10.81	32.84	5.88		20	10.80	32.84	5.89		25.15	283.1	0.056	
46	10.82	32.84	5.99		30	10.81	32.84	5.93		25.15	283.2	0.085	
67	9.71	33.26	4.46		50	10.82	32.84	5.94		25.15	283.8	0.142	
92	9.44	33.55	3.59		75	9.65	33.32	4.15		25.72	229.9	0.206	
137	8.62	33.92	2.16		100	9.28	33.67	3.31		26.05	198.6	0.259	
182	8.27	34.03	1.89		150	8.53	33.96	2.03		26.40	166.7	0.351	
271	7.43	34.20	1.26		200	8.12	34.07	1.75		26.55	153.2	0.430	
363	6.41	34.22	0.80		250	7.66	34.17	1.39		26.69	140.0	0.504	
452	5.88	34.22	0.86		300	7.05	34.21	1.07		26.81	128.9	0.571	
541	5.45	34.29	0.50		400	6.17	34.22	0.84		26.94	118.1	0.694	
715	4.60	34.40	0.42		500	5.64	34.24	0.68		27.02	111.4	0.809	
895	4.00	34.48	0.53		600	5.14	34.34	0.44		27.16	98.9	0.914	
1082	3.54	34.51	0.65		700	4.66	34.39	0.43		27.25	90.2	1.010	
					800	4.30	34.44	0.44		27.33	83.1	1.096	
					1000	3.73	34.50	0.62		27.44	74.0	1.253	
BLACK DOUGLAS; April 4, 1950; 1723, 1815 GCT; 36°04'N, 122°03'W; sounding, 800 fm; wind, 320°, force 4; weather, partly cloudy; sea, very rough; wire angle, 7°, 9°.													70.55
0	10.15	33.51	5.22		0	10.15	33.51	5.22		25.79	222.3	0.000	
10	10.15	33.48	5.34		10	10.15	33.48	5.34		25.76	224.8	0.022	
25	10.12	-	4.83		20	10.14	(33.48)	5.05		(25.76)	(224.9)	(0.045)	
53	9.34	33.65	3.55		30	10.07	(33.56)	4.65		(25.84)	(218.0)	(0.067)	
77	8.94	33.66	2.69		50	9.48	(33.65)	3.67		(26.01)	(202.2)	(0.109)	
106	8.78	33.95	2.22		75	8.98	33.66	2.77		26.09	194.3	(0.158)	
159	7.77	34.09	1.89		100	8.82	33.91	2.31		26.32	173.8	(0.204)	
212	7.35	34.05	1.76		150	7.99	34.08	1.92		26.58	149.6	(0.285)	
317	6.78	34.19	0.81		200	7.43	34.06	1.78		26.64	144.1	(0.359)	
					250	7.12	34.09	1.45		26.71	138.4	(0.429)	
420	5.99	34.25	0.51		300	6.86	34.18	0.92		26.81	129.0	(0.497)	
525	5.47	-	0.55		400	6.12	34.24	0.54		26.96	116.2	(0.619)	
630	4.98	34.34	0.33		500	5.57	34.29	0.55		27.07	106.7	(0.731)	
836	4.19	34.42	0.45		600	5.10	34.33	0.38		27.16	99.1	(0.833)	
1048	3.67	34.47	0.65		700	4.67	34.38	0.33		27.24	91.0	(0.928)	
					800	4.30	34.41	0.41		27.31	85.5	(1.017)	
					1000	3.75	34.46	0.62		27.40	77.2	(1.180)	

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

70.60 BLACK DOUGLAS; April 4, 1950; 2234 GCT; 35°53'N, 122°23'W; sounding, 1,730 fm; wind, 300°, force 4; weather, overcast; sea, high; wire angle, 29°.

0	11.38	33.35	6.34	0	11.38	33.35	6.34	25.45	254.6	0.000
8	11.26	33.37	6.34	10	11.20	33.37	6.34	25.49	250.3	0.025
21	10.52	33.36	5.97	20	10.55	33.36	6.10	25.60	240.4	0.050
42	9.69	33.53	4.19	30	10.12	33.37	5.10	25.68	232.9	0.073
64	9.39	33.60	3.92	50	9.56	33.56	4.05	25.92	210.2	0.118
84	8.72	33.68	3.27	75	8.85	33.64	3.55	26.10	193.9	0.168
130	8.49	33.91	2.54	100	8.64	33.77	2.90	26.23	181.6	0.215
172	8.18	33.96	2.35	150	8.35	33.94	2.43	26.41	165.4	0.302
255	7.24	34.14	1.48	200	7.95	34.00	2.10	26.52	155.9	0.383
341	6.38a)	34.16	1.05	250	7.35	34.12	1.53	26.70	139.3	0.456
423	6.00	34.18	0.76	300	6.65	34.16	1.20	26.83	127.7	0.523
511	5.69b)	34.25	0.51	400	6.11	34.17	0.84	26.91	121.1	0.648
685	4.88	34.38	0.56	500	5.75	34.24	0.54	27.00	112.8	0.765
862	4.20	34.49	0.60	600	5.27	34.31	0.53	27.12	102.7	0.872
1054	3.58	34.51	0.83	700	4.82	34.39	0.57	27.23	92.3	0.970
				800	4.43	34.46	0.59	27.34	83.3	1.057
				1000	3.74	34.51	0.76	27.45	73.3	1.214

70.70 BLACK DOUGLAS; April 5, 1950; 0550 GCT; 35°33'N, 123°06'W; sounding, 2,075 fm; wind, 260°, force 2; weather, overcast; sea, rough; wire angle, 7°.

0	12.18	32.94	5.98	0	12.18	32.94	5.98	24.98	299.1	0.000
10	12.16	32.95	5.90	10	12.16	32.95	5.90	24.99	298.1	0.030
25	12.13	32.95	5.99	20	12.13	32.95	5.95	24.99	298.0	0.060
49	12.12	32.95	6.13	30	12.10	32.95	6.04	25.00	297.7	0.089
73	10.95	33.01	5.80	50	12.10	32.95	6.12	25.00	298.1	0.149
96	9.54	33.22	4.77	75	10.70	33.02	5.76	25.31	269.0	0.220
148	8.54	33.80	2.91	100	9.44	33.26	4.56	25.71	231.6	0.282
194	7.89	33.95	2.51	150	8.50	33.82	2.88	26.29	176.6	0.385
283	7.14	34.08	1.63	200	7.84	33.96	2.46	26.50	157.4	0.468
378	6.60	34.22	0.80	250	7.38	34.03	1.94	26.63	146.3	0.544
469	6.14	34.25	0.53	300	7.03	34.11	1.44	26.73	136.6	0.615
565	5.53c)	34.31	0.41	400	6.49	34.23	0.71	26.90	121.6	0.744
756	4.47	34.36	0.32	500	5.96	34.27	0.48	27.00	113.1	0.861
945	3.96	34.43	0.57	600	5.28	34.33	0.40	27.13	101.3	0.968
1145	3.55	34.48	0.66	700	4.68	34.35	0.35	27.22	93.3	1.065
				800	4.34	34.37	0.38	27.27	88.9	1.156
				1000	3.85	34.45	0.62	27.39	79.1	1.324

70.80 BLACK DOUGLAS; April 5, 1950; 1301 GCT; 35°13'N, 123°48'W; sounding, 2,210 fm; wind, 250°, force 1; weather, clear; sea, rough; wire angle, 0°.

0	12.61	33.09	5.87	0	12.61	33.09	5.87	25.01	295.6	0.000
10	12.64	33.09	6.09	10	12.64	33.09	6.09	25.01	296.3	0.030
25	12.59	33.08	6.09	20	12.60	33.08	6.09	25.00	296.8	0.059
49	12.19	33.17	-	30	12.59	33.08	6.08	25.01	296.9	0.089
74	11.42	33.27	5.58	50	12.18	33.17	5.93	25.15	283.5	0.147
98	10.15	33.41	4.30	75	11.35	33.27	5.52	25.39	261.7	0.215
153	8.78	33.78	3.05	100	10.06	33.44	4.25	25.74	228.1	0.276
201	8.15	33.96	2.71	150	8.82	33.76	3.09	26.20	185.8	0.380
298	6.90	34.00	2.03	200	8.15	33.95	2.73	26.45	162.3	0.467
400	5.98	34.07	1.15	250	7.49	33.99	2.39	26.58	150.7	0.545
497	5.66	34.18	0.60	300	6.87	34.00	2.01	26.67	142.5	0.618
599	5.10	34.23	0.43	400	5.98	34.07	1.15	26.84	126.9	0.753
799	4.41	34.36	0.39	500	5.63	34.18	0.58	26.97	115.8	0.875
995	3.82	34.43	0.64	600	5.09	34.23	0.42	27.08	106.3	0.986
1198	3.34	34.49	0.96	700	4.72	34.30	0.39	27.18	97.5	1.087
				800	4.40	34.36	0.39	27.26	90.2	1.181
				1000	3.81	34.43	0.66	27.37	80.2	1.352

a) Alternate value, 6.47°C, not used in interpolation.
b) Alternate value, 5.76°C, not used in interpolation.
c) Alternate value, 5.60°C, not used in interpolation.

BLACK DOUGLAS; April 5, 1950; 1928 GCT; 34°53'N, 124°30'W; sounding, 2,340 fm; wind, 200°, force 1; weather, partly cloudy; sea, moderate; wire angle, 5°. 70.90

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
0	13.15	33.15	6.00		0	13.15	33.15	6.00		24.95	301.4	0.000
10	12.74	33.13	5.93		10	12.74	33.13	5.93		25.02	295.6	0.030
25	12.48	33.09	5.99		20	12.55	33.10	5.98		25.03	294.4	0.059
49	11.07	33.10	5.94		30	12.25	33.09	5.99		25.08	289.9	0.088
73	10.69	33.26	5.44		50	11.05	33.10	5.93		25.31	268.5	0.144
97	10.25	33.43	4.79		75	10.68	33.28	5.40		25.52	249.5	0.209
150	8.96	33.78	2.79r		100	10.22	33.45	4.70		25.73	229.9	0.269
198	7.91	33.87	3.02		150	8.96	33.78	3.51		26.19	186.3	0.373
293	6.94	34.00	2.12		200	7.87	33.89	3.00		26.44	162.9	0.460
393	6.36	34.14	0.90		250	7.32	33.96	2.54		26.58	151.1	0.539
489	5.67	34.20	0.52		300	6.91	34.01	2.01		26.67	142.4	0.612
591	5.26	34.31	0.36		400	6.30	34.15	0.82		26.87	125.2	0.746
793	4.42	34.35	0.37		500	5.62	34.20	0.48		26.99	114.1	0.866
990	3.76	34.43	0.52		600	5.23	34.31	0.36		27.12	102.3	0.974
1193	3.32	34.49	0.76		700	4.78	34.34	0.36		27.20	95.4	1.073
					800	4.39	34.35	0.38		27.25	90.7	1.166
					1000	3.73	34.43	0.54		27.38	79.2	1.336

BLACK DOUGLAS; April 6, 1950; 0132, 0209 GCT; 34°33'N, 125°12'W; sounding, 2,500 fm; wind, 200°, force 2; weather, overcast; sea, slight; wire angle, 5°, 11°. 70.100

0	14.30	33.08		0	14.30	33.08	24.66	329.1	0.000
10	14.26	33.08		10	14.26	33.08	24.67	328.9	0.033
25	14.08	33.08		20	14.13	33.08	24.70	326.3	0.066
49	13.99	33.10		30	14.04	33.08	24.72	324.8	0.098
73	12.85	32.88		50	13.97	33.10	24.75	322.2	0.163
97	11.31	32.95		75	12.58	32.88	24.86	312.3	0.242
151	9.32	33.48		100	11.24	33.00	25.20	280.3	0.316
199	8.46	33.80		150	9.40	33.48	25.88	215.5	0.440
293	7.22	33.98		200	8.42	33.80	26.29	177.7	0.539
				250	7.70	33.91	26.48	159.9	0.623
296	7.21	34.02r		300	7.17	34.00	26.63	146.4	0.700
397	6.40	34.14		400	6.39	34.14	26.85	127.0	0.836
492	5.83	34.20		500	5.82	34.20	26.96	116.7	0.958
593	5.06a)	34.22		600	5.00	34.22	27.08	106.0	1.069
790	4.36	34.38		700	4.63	34.30	27.18	96.6	1.170
985	3.76	34.42		800	4.31	34.38	27.28	87.9	1.263
1189	3.31	34.47		1000	3.70	34.42	27.38	79.5	1.431

BLACK DOUGLAS; April 6, 1950; 0833 GCT; 34°13'N, 125°54'W; sounding, 2,000 fm; wind, 280°, force 2; weather, drizzle; sea, moderate; wire angle, 10°. 70.110

0	14.55	33.08	5.88	0	14.55	33.08	5.88	24.61	334.0	0.000
10	14.53	33.10	5.83	10	14.53	33.10	5.83	24.63	333.2	0.033
25	14.37	33.08	5.83	20	14.40	33.08	5.84	24.64	331.6	0.067
49	14.28	33.10	5.78	30	14.34	33.08	5.83	24.65	330.8	0.100
74	13.61	33.08	5.93	50	14.28	33.10	5.77	24.68	328.5	0.166
98	12.79	32.97	5.87	75	13.56	33.07	5.93	24.81	317.0	0.246
151	10.25	33.13	5.22	100	12.78	32.97	5.87	24.89	310.1	0.325
199	9.19	33.62	3.65	150	10.28	33.12	5.25	25.46	256.2	0.466
294	7.68	34.00	2.50	200	9.14	33.62	3.64	26.04	202.0	0.581
392	6.47	34.04	1.71	250	8.34	33.89	2.92	26.37	170.6	0.674
486	5.69	34.07	1.01	300	7.59	34.01	2.45	26.58	151.6	0.754
584	5.04b)	34.18	0.62	400	6.39	34.04	1.65	26.77	134.3	0.897
778	4.44	34.34	0.36	500	5.61	34.08	0.95	26.90	122.9	1.026
970	3.92	34.43	0.54	600	4.96	34.19	0.59	27.06	107.6	1.141
1171	3.36	34.45	0.76	700	4.67	34.28	0.42	27.17	98.5	1.244
				800	4.39	34.36	0.37	27.26	90.0	1.339
				1000	3.83	34.44	0.58	27.38	79.6	1.508

a) Mean value of 5.09 and 5.03°C.
b) Mean value of 5.07 and 5.00°C.

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

70.120 BLACK DOUGLAS; April 6, 1950; 1537 GCT; 33°53'N, 126°35.5'W; sounding, 2,560 fm; wind, 300°, force 3; weather, overcast; sea, rough; wire angle, 3°.

0	14.46	33.02	5.04	0	14.46	33.02	5.04		24.59	336.4	0.000
10	14.52	33.03	5.04	10	14.52	33.03	5.04		24.58	337.3	0.034
25	14.53	33.03	4.91	20	14.54	33.03	4.95		24.57	338.1	0.067
50	14.37	33.04	4.91	30	14.50	33.03	4.92		24.58	337.4	0.101
74	14.15	33.10	4.42	50	14.37	33.04	4.91		24.62	334.7	0.168
99	12.81	32.96	5.04	75	14.11	33.10	4.42		24.72	325.9	0.251
154	9.91	33.25	4.27	100	12.81	32.96	5.04		24.87	311.6	0.331
203	8.78	33.55	3.77	150	10.03	33.23	4.33		25.59	244.1	0.469
299	7.89	34.02	1.96	200	8.85	33.53	3.82		26.01	204.2	0.582
401	7.10	34.11	1.03	250	8.28	33.81	2.80		26.32	175.8	0.677
498	6.14	34.13	1.00	300	7.89	34.02	1.94		26.54	155.2	0.759
599	5.31	34.19	0.48	400	7.11	34.11	1.03		26.72	139.2	0.907
798	4.49	34.30	0.48	500	6.12	34.13	1.00		26.87	125.7	1.039
995	3.96	34.40	0.50	600	5.29	34.19	0.48		27.02	111.7	1.158
1198	3.42	34.47	0.75	700	4.82	34.25	0.47		27.12	102.5	1.265
				800	4.48	34.30	0.48		27.20	95.7	1.364
				1000	3.94	34.40	0.51		27.34	83.9	1.544

70.130 BLACK DOUGLAS; April 6, 1950; 2139 GCT; 33°33'N, 127°16.5'W; sounding, 2,420 fm; wind, 290°, force 3; weather, cloudy; sea, very rough; wire angle, 6°.

0	15.26	33.18	5.75	0	15.26	33.18	5.75		24.53	341.4	0.000
10	15.18	33.17	5.68	10	15.18	33.17	5.68		24.54	340.9	0.034
25	15.15	33.21	5.76	20	15.16	33.20	5.72		24.57	338.3	0.068
55	14.47	33.17	5.84	30	15.10	33.21	5.80		24.59	336.6	0.102
80	12.97	33.06	5.95	50	14.58	33.18	5.83		24.68	328.7	0.168
110	11.36	33.17	5.70	75	13.29	33.03	5.94		24.83	314.7	0.249
164	9.35	33.57	4.28	100	11.85	33.09	5.82		25.16	284.2	0.324
218	8.54	33.87	4.10	150	9.62	33.48	4.42		25.85	219.0	0.450
325	6.97	33.95	2.97	200	8.78	33.81	4.16		26.24	181.9	0.550
436	5.62	34.04	1.44	250	8.10	33.90	3.90		26.42	166.3	0.637
542	5.28	34.15	0.54	300	7.34	33.93	3.37		26.55	154.0	0.716
647	4.63	34.22	0.42	400	5.88	34.00	1.85		26.80	130.8	0.859
853	3.96	34.34	0.42	500	5.46	34.10	0.82		26.93	119.6	0.984
1061	3.61	34.43	0.73	600	4.90	34.19	0.44		27.07	107.0	1.097
1264	3.09	34.43	0.95	700	4.38	34.25	0.40		27.17	97.3	1.199
				800	4.09	34.31	0.41		27.25	90.2	1.293
				1000	3.74	34.40	0.63		27.36	81.6	1.465

80.55 HORIZON; April 4, 1950; 1821 GCT; 34°21'N, 120°50'W; sounding, 395 fm; wind, 320°, force 4; weather, partly cloudy; sea, very rough; wire angle, 22°.

0	10.11	33.80	4.65	-	0	10.11	33.80	4.65		26.01	200.5	0.000
9	10.06	33.77	3.92	-	10	10.05	33.77	3.93		26.00	201.8	0.020
23	9.97	33.77	4.24	-	20	10.00	33.77	4.23		26.01	201.1	0.040
46	9.89	33.81	4.09	1.78	30	9.94	33.78	4.21		26.03	199.5	0.060
92	9.01	33.84	2.53	2.02	50	9.85	33.81	4.02	1.83	26.07	196.4	0.100
142	8.63	33.86	2.35	2.08	75	9.32	33.83	3.32	1.98	26.17	187.0	0.148
188	7.88	34.00	2.06	2.20	100	8.93	33.84	2.47	2.04	26.24	180.8	0.194
235	8.14a)	34.14	1.63	2.48	150	8.47	33.88	2.32	2.09	26.35	171.7	0.282
283	7.05	34.14	1.18	2.58	200	7.77	34.05	1.96	2.30	26.58	149.7	0.362
336	6.60	34.20	0.84	2.70	250	7.32	34.14	1.48	2.52	26.72	137.5	0.434
385	6.29	34.22	0.72	2.66	300	6.88	34.15	1.02	2.62	26.79	131.5	0.502
435	6.16	34.22	0.53	2.74	400	6.25	34.22	0.62	2.67	26.93	119.3	0.627
486	5.83	34.29	0.67	2.76	500	5.76	34.30	0.67	2.76	27.05	108.4	0.741
591	5.42	34.33	0.38	2.90								

a) Alternate value, 6.27°C; both values rejected.

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

80.60

HORIZON; April 4, 1950; 2145 GCT; 34°09'N, 121°09'W; sounding, 1,360 fm; wind, 320°, force 4; weather, cloudy; sea, very rough; wire angle, 39°.

0	12.18	33.44	5.68	0.76	0	12.18	33.44	5.68	0.76	25.37	262.2	0.000
8	12.17	33.40	5.25	0.80	10	12.15	33.40	5.23	0.80	25.34	264.9	0.026
21	12.13	33.40	5.16	0.73	20	12.12	33.40	5.17	0.74	25.34	264.7	0.053
43	12.06	33.40	5.26	0.78	30	12.10	33.40	5.18	0.75	25.35	264.6	0.079
62	11.43	33.37	5.00	0.86	50	12.03	33.39	5.22	0.81	25.35	264.5	0.132
86	10.80	33.44	4.87	1.11	75	11.07	33.40	4.91	0.97	25.54	247.4	0.196
126	9.41	33.69	2.85	1.80	100	10.17	33.52	4.72	1.34	25.79	223.9	0.255
163	8.80	33.96	2.13	2.06	150	9.01	33.90	2.29	2.01	26.28	178.3	0.356
228	7.28	34.07	1.91	2.26	200	8.00	34.04	1.96	2.21	26.54	153.6	0.438
290	6.64	34.11	1.25	2.72	250	7.00	34.08	1.75	2.30	26.72	137.5	0.512
355	6.28	34.20	0.60	2.80	300	6.59	34.13	1.07	2.74	26.81	129.0	0.578
423	5.89	34.25	0.37	2.90	400	6.00	34.24	0.41	2.88	26.97	114.6	0.699
574	5.40	34.23	0.39	3.01	500	5.62	34.25	0.36	2.95	27.03	110.3	0.812
740	4.76	34.40	0.65	3.03	600	5.31	34.24	0.43	3.02	27.06	108.5	0.922
923	4.19	34.47	1.48r	3.08	700	4.92	34.34	0.60	3.03	27.18	97.1	1.024
					800	4.55	34.44		3.04	27.31	86.2	1.116
					1000	(3.98)	(34.48)		(3.08)	(27.40)	(78.3)	(1.281)

80.70

HORIZON; April 5, 1950; 0409 GCT; 33°49'N, 121°51'W; sounding, 2,025 fm; wind, 320°, force 4; weather, overcast; sea, very rough; wire angle, 19°.

0	12.50	33.35	5.87	0.67	0	12.50	33.35	5.87	0.67	25.23	274.7	0.000
9	12.53	33.31	5.87	0.62	10	12.54	33.31	5.87	0.62	25.19	278.8	0.028
23	12.36	33.33	6.03	0.65	20	12.42	33.32	6.02	0.64	25.22	276.1	0.055
51	11.46	33.42	5.95	0.76	30	12.24	33.36	6.01	0.67	25.29	269.9	0.083
75	10.28	33.47	4.94	1.24	50	11.69	33.42	5.96	0.76	25.44	256.1	0.135
102	9.56	33.64	3.49	1.70	75	10.28	33.47	4.94	1.24	25.74	228.1	0.196
153	8.28	34.00	2.52	2.01	100	9.57	33.61	3.54	1.66	25.96	207.7	0.250
203	7.70	33.93	2.18	2.18	150	8.33	34.00	2.55	2.00	26.46	160.7	0.342
303	6.75	34.13	1.19	2.49	200	7.74	33.93	2.19	2.17	26.49	158.1	0.422
407	6.23	34.27	0.57	2.75	250	7.23	34.02	1.77	2.32	26.64	145.2	0.498
506	5.61	34.33	0.43	2.94	300	6.78	34.12	1.23	2.48	26.78	132.4	0.567
605	5.11	34.33	0.33	2.94	400	6.26	34.26	0.56	2.74	26.98	116.4	0.691
800	4.34	34.43	0.41	2.96	500	5.67	34.33	0.43	2.93	27.09	105.1	0.802
998	3.79	34.47	0.60	3.02	600	5.14	34.33	0.33	2.94	27.15	99.7	0.905
1195	3.38	34.51	0.81	2.98	700	4.72	34.38	0.33	2.94	27.24	91.7	1.000
					800	4.34	34.43	0.41	2.96	27.32	84.5	1.089
					1000	3.79	34.47	0.61	3.02	27.41	76.8	1.250

80.80

HORIZON; April 5, 1950; 1012 GCT; 33°30'N, 122°37'W; sounding, 2,080 fm; wind, 320°, force 2; weather, partly cloudy; sea, rough; wire angle, 17°.

0	12.31	33.42	6.11	0.72	0	12.31	33.42	6.11	0.72	25.32	266.2	0.000
10	12.32	33.37	6.11	0.76	10	12.32	33.37	6.11	0.76	25.29	269.9	0.027
24	12.12	33.37	3.06r	0.78	20	12.23	33.37	(6.09)	0.77	25.30	268.7	0.054
52	11.92	33.42	5.84	0.77	30	12.05	33.37	(6.03)	0.78	25.33	265.9	0.080
76	9.93	33.37	4.94	1.20	50	11.94	33.42	(5.86)	0.78	25.39	260.5	0.133
104	9.30	33.58	3.71	1.68	75	9.93	33.37	5.04	1.00	25.71	230.6	0.194
156	8.59	33.90	2.73	2.00	100	9.37	33.54	3.78	1.62	25.94	209.8	0.250
207	7.74	34.02	2.27	2.25	150	8.64	33.87	2.85	1.97	26.31	174.9	0.346
310	6.60	34.08	1.51	2.53	200	7.87	34.00	2.30	2.21	26.53	154.7	0.428
417	6.03	34.22	0.57	2.89	250	7.19	34.04	1.96	2.39	26.66	142.8	0.503
518	5.50	34.27	0.43	2.94	300	6.67	34.07	1.58	2.51	26.75	134.6	0.571
620	4.96	34.34	0.33	2.94	400	6.08	34.20	0.69	2.83	26.93	118.5	0.698
821	4.24	34.40	0.48	2.96	500	5.63	34.26	0.42	2.94	27.04	109.8	0.812
1025	3.74	34.43	0.65	3.02	600	5.05	34.33	0.35	2.94	27.16	98.4	0.916
1227	3.22	34.51	0.91	2.95	700	4.62	34.37	0.36	2.95	27.24	91.3	1.083
					800	4.29	34.40	0.45	2.96	27.30	86.1	1.101
					1000	3.79	34.42	0.62	3.01	27.37	80.5	1.267

SIO

CCOFI 5004

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

80.90 HORIZON; April 5, 1950; 1625 GCT; 33°09'N, 123°13'W; sounding, 2,470 fm; wind, 320°, force 2; weather, partly cloudy; sea, rough; wire angle, 14°.

0	12.82	33.26	5.81	0.60	0	12.82	33.26	5.81	0.60	25.11	286.9	0.000
9	12.82	33.26	5.95	0.51	10	12.80	33.26	5.96	0.51	25.11	287.0	0.029
24	12.77	33.26	6.03	0.61	20	12.78	33.26	6.02	0.58	25.11	287.1	0.057
48	12.09	33.26	6.03	0.59	30	12.76	33.26	6.03	0.62	25.11	286.9	0.086
73	11.30	33.51	5.64	0.95	50	11.87	33.26	6.02	0.59	25.29	270.9	0.142
96	9.62	33.55	3.82	1.68	75	11.20	33.52	5.60	1.00	25.61	240.8	0.206
149	8.68	33.86	2.82	1.96	100	9.49	33.56	3.68	1.72	25.94	209.9	0.262
196	8.16	34.00	2.55	2.02	150	8.65	33.82	2.81	1.96	26.27	178.7	0.359
291	7.00	34.11	1.40	2.50	200	8.07	34.01	2.53	2.03	26.51	156.9	0.443
393	6.28	34.18	0.84	2.76	250	7.44	34.07	2.01	2.21	26.65	144.4	0.519
487	5.64	34.22	0.61	3.04	300	6.92	34.12	1.29	2.55	26.76	134.4	0.588
588	5.28	34.38	0.37	3.02	400	6.23	34.18	0.81	2.77	26.90	122.1	0.716
786	4.38	34.40	0.45	3.06	500	5.58	34.26	0.58	3.04	27.04	109.0	0.832
980	3.81	34.47	0.62	3.03	600	5.22	34.38	0.36	3.02	27.18	96.9	0.935
1183	3.32	34.52	0.83	3.03	700	4.70	34.40	0.37	3.05	27.26	89.9	1.028
					800	4.31	34.40	0.46	3.06	27.30	86.3	1.116
					1000	3.75	34.47	0.63	3.03	27.41	76.4	1.279

80.100 HORIZON; April 5, 1950; 2238 GCT; 32°49'N, 123°54'W; sounding, 2,020 fm; wind, 270°, force 2; weather, partly cloudy; sea, moderate; wire angle, 5°.

0	14.98	33.08	5.36	0.54	0	14.98	33.08	5.36	0.54	24.52	342.9	0.000
10	13.94	33.12	5.54	0.53	10	13.94	33.12	5.54	0.53	24.78	318.6	0.033
25	13.76	33.19	5.68	0.57	20	13.80	33.18	5.66	0.55	24.84	312.5	0.065
49	11.78	33.15	5.75	0.76	30	13.73	33.18	5.72	0.59	24.86	311.4	0.096
74	10.72	33.21	5.18	1.02	50	11.76	33.15	5.75	0.76	25.22	276.9	0.155
100	10.12	33.44	4.39	1.33	75	10.65	33.20	5.18	1.02	25.46	255.0	0.221
155	8.60	33.78	2.76	2.08	100	10.12	33.44	4.39	1.33	25.73	229.1	0.282
205	8.03	34.05	2.12	2.33	150	8.64	33.76	2.89	2.01	26.23	183.1	0.385
304	7.11	34.11	1.34	2.65	200	8.05	34.03	2.17	2.31	26.53	155.2	0.469
406	5.88	34.11	1.07	2.85	250	7.59	34.09	1.70	2.48	26.64	144.8	0.545
504	5.08	34.16	0.79	2.96	300	7.15	34.11	1.36	2.63	26.72	138.1	0.615
608	4.66	34.25	0.46	3.01	400	5.98	34.11	1.08	2.84	26.88	123.9	0.746
809	4.06	34.38	0.41	3.09	500	5.11	34.16	0.79	2.95	27.02	110.8	0.863
1006	3.66	34.49	0.65	3.20	600	4.68	34.24	0.49	3.01	27.13	100.6	0.969
1209	3.24	34.56	0.89	3.06	700	4.36	34.32	0.43	3.06	27.23	91.8	1.065
					800	4.09	34.38	0.42	3.09	27.31	85.1	1.153
					1000	3.65	34.49	0.64	3.20	27.44	73.8	1.313

80.110 HORIZON; April 6, 1950; 0451 GCT; 32°29'N, 124°34.5'W; sounding, 2,080 fm; wind, 270°, force 2; weather, cloudy; sea, moderate; wire angle, 17°.

0	14.27	32.99	5.83	0.53	0	14.27	32.99	5.83	0.53	24.60	335.1	0.000
10	13.82	32.97	5.77	0.49	10	13.82	32.97	5.77	0.49	24.68	327.7	0.033
24	13.67	32.97	5.79	0.52	20	13.70	32.97	5.77	0.51	24.70	325.8	0.066
48	13.26	32.97	5.68	0.54	30	13.59	32.97	5.76	0.53	24.72	324.0	0.098
72	12.44	33.06	5.92	0.66	50	13.22	32.97	5.67	0.54	24.80	317.3	0.162
95	11.14	33.12	6.09	0.84	75	12.17	33.07	5.93	0.68	25.08	290.9	0.238
146	9.25	33.46	3.98	1.76	100	10.85	33.13	6.07	0.88	25.37	264.0	0.308
192	8.40	33.82	3.06	2.03	150	9.15	33.50	3.87	1.82	25.94	210.1	0.427
284	7.40	34.07	1.88	2.47	200	8.31	33.85	2.96	2.07	26.35	172.4	0.522
379	6.21	34.11	1.21	2.82	250	7.77	34.01	2.27	2.32	26.55	153.4	0.603
471	5.68	34.20	0.68	3.06	300	7.16	34.08	1.74	2.54	26.70	140.4	0.677
567	4.86	34.27	0.46	3.01	400	6.07	34.12	1.07	2.90	26.87	124.3	0.808
758	4.35	34.36	0.37	3.19	500	5.43	34.22	0.59	3.05	27.03	110.2	0.927
947	3.69	34.42	0.53	3.14	600	4.72	34.29	0.43	3.03	27.17	97.4	1.030
1147	3.24	34.51	0.83	3.19	700	4.50	34.34	0.37	3.14	27.23	92.0	1.125
					800	4.19	34.37	0.39	3.19	27.29	87.0	1.214
					1000	3.57	34.43	0.61	3.14	27.40	77.3	1.379

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	µg at/L	m	°C	‰	ml/L	µg at/L	g/L	$10^5 cm^3/g$	dyn. m

HORIZON; April 6, 1950; 1104 GCT; 32°08'N, 125°16'W; sounding, 2,560 fm; wind, 270°, force 2; weather, partly cloudy; sea, moderate; wire angle, 16°. 80.120

0	15.31	33.22	5.08	0.44	0	15.31	33.22	5.08	0.44	24.56	339.3	0.000
10	15.28	33.31	5.13	0.46	10	15.28	33.31	5.13	0.46	24.62	333.0	0.034
24	15.32	33.35	4.76	0.46	20	15.30	33.34	4.83	0.46	24.65	331.0	0.067
48	16.37	33.84	4.87	0.34	30	15.31	33.39	4.77	0.44	24.68	327.8	0.100
72	16.43	33.84	5.09	0.36	50	16.39	33.84	4.87	0.34	24.79	318.5	0.164
96	15.67	33.91	4.92	0.37	75	16.40	33.84	5.07	0.36	24.79	319.6	0.244
148	13.55	33.91	4.71	0.64	100	15.41	33.91	4.88	0.37	25.06	293.9	0.321
195	10.18	33.82	4.66	1.16	150	13.05	33.91	4.71	0.69	25.56	247.5	0.456
288	8.06	33.96	3.69	1.65	200	10.05	33.82	4.63	1.20	26.04	201.7	0.569
385	6.47	34.02	2.04	2.36	250	8.81	33.90	4.32	1.51	26.31	177.0	0.663
476	5.60	34.07	1.18	2.92	300	7.80	33.97	3.27	1.70	26.52	157.6	0.747
573	5.12	34.14	0.83	3.00	400	6.29	34.03	1.88	2.28	26.77	133.8	0.892
763	4.42	34.34	0.39	3.15	500	5.45	34.09	1.08	2.95	26.92	120.1	1.019
951	3.87	34.45	0.30	3.16	600	5.00	34.17	0.74	3.01	27.04	109.8	1.134
1152	3.40	34.51	0.83	3.12	700	4.62	34.28	0.49	3.09	27.17	98.1	1.238
					800	4.30	34.37	0.36	3.15	27.28	87.6	1.331
					1000	3.75	34.46	0.36	3.15	27.40	77.1	1.496

HORIZON; April 6, 1950; 1717 GCT; 31°49.5'N, 125°58'W; sounding, 2,450 fm; wind, 200°, force 3; weather, squally; sea, moderate; wire angle, 23°. 80.130

0	15.62	33.40	5.13	0.35	0	15.62	33.40	5.13	0.35	24.63	332.6	0.000
9	15.62	33.42	5.35	0.36	10	15.61	33.42	5.33	0.36	24.64	331.4	0.033
23	15.54	33.46	4.87	0.37	20	15.55	33.45	4.89	0.36	24.68	328.1	0.066
46	15.54	33.44	4.86	0.38	30	15.54	33.46	4.87	0.37	24.69	327.5	0.099
69	15.59	33.51	4.97	0.37	50	15.56	33.44	4.88	0.38	24.67	330.1	0.165
92	15.02	33.58	4.89	0.35	75	15.60	33.54	4.95	0.36	24.73	324.3	0.246
143	12.02	33.44	4.92	0.72	100	13.90	33.57	4.89	0.36	25.12	287.8	0.323
189	9.81	33.62	3.95	1.25	150	11.25	33.44	4.89	0.80	25.54	249.0	0.457
281	8.06	34.00	2.88	1.95	200	9.58	33.73	3.71	1.35	26.05	200.7	0.570
378	6.46	34.04	1.64	2.58	250	8.64	33.95	3.03	1.75	26.37	170.8	0.663
566	5.52	34.29	0.36	3.00	300	7.73	34.01	2.64	2.09	26.56	153.8	0.743
755	4.66	34.34	0.33	3.07	400	6.29	34.05	1.41	2.67	26.79	132.4	0.887
941	4.05	34.45	0.52	3.14	500	5.78	34.19	0.62	2.93	26.96	116.8	1.011
1139	3.58	34.49	0.76	3.18	600	5.35	34.30	0.34	3.01	27.10	104.5	1.122
					700	4.88	34.32	0.31	3.06	27.17	98.1	1.223
					800	4.50	34.37	0.35	3.09	27.26	90.7	1.318
					1000	3.88	34.47	0.61	3.16	27.40	78.0	1.486

HORIZON; April 12, 1950; 1310 GCT; 33°42'N, 120°24'W; sounding, 500 fm; wind, 310°, force 3; weather, clear; sea, very rough; wire angle, 49°. 83.55

0	11.49	33.69	5.68	1.29	0	11.49	33.69	5.68	1.29	25.69	231.5	0.000
9	11.51	33.66	-	1.22	10	11.51	33.66	5.83	1.22	25.66	234.4	0.023
23	11.42	33.67	5.94	1.23	20	11.45	33.67	5.93	1.23	25.68	232.8	0.047
48	11.15	33.62	4.49	1.56	30	11.40	33.66	5.89	1.27	25.68	232.9	0.070
74	9.57	33.66	3.72	1.79	50	10.56	33.62	4.44	1.57	25.80	221.6	0.115
102	8.96	33.78	3.72	2.47r	75	9.53	33.66	3.69	1.80	26.00	202.9	0.168
157	8.30	33.93	2.89	2.12	100	9.03	33.78	3.25	1.95	26.18	186.6	0.217
213	7.50	34.04	3.07	2.10	150	8.37	33.91	2.91	2.11	26.38	167.9	0.305
322	6.37	34.05	1.75	2.56	200	7.66	34.02	3.02	2.11	26.58	150.3	0.386
439	6.04	34.18	0.78	3.02	250	6.92	34.05	2.74	2.17	26.70	138.9	0.457
552	5.44	34.38	0.52	3.21	300	6.47	34.05	2.07	2.39	26.77	133.3	0.526
					400	6.14	34.11	0.96	2.92	26.85	126.1	0.656
					500	5.80	34.31	0.59	3.14	27.05	108.3	0.773

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5004

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
83.60	HORIZON; April 12, 1950; 0909 GCT; 33°34'N, 120°45'W; sounding, 1,275 fm; wind, 320°, force 6; weather, partly cloudy; sea, rough; wire angle, 44°.											
0	12.34	33.42	5.13	0.88	0	12.34	33.42	5.13	0.88	25.32	266.9	0.000
8	12.35	33.37	5.17	0.90	10	12.35	33.37	5.17	0.90	25.28	270.8	0.027
23	12.31	33.40	5.14	0.94	20	12.33	33.40	5.15	0.92	25.30	268.5	0.054
44	11.70	33.46	4.91	1.04	30	12.29	33.42	5.08	0.96	25.33	266.3	0.080
65	11.07	33.51	4.81	1.30	50	11.53	33.47	4.88	1.10	25.51	249.6	0.132
86	9.71	33.49	3.74	1.73	75	10.25	33.51	4.61	1.50	25.77	225.5	0.192
128	8.80	33.77	2.97	2.62r	100	9.37	33.56	3.36	1.87	25.95	208.2	0.246
168	8.28	33.91	2.50	2.31	150	8.47	33.86	2.71	2.23	26.33	173.1	0.341
245	7.44	34.05	1.81	2.65	200	7.94	33.97	2.14	2.47	26.50	158.0	0.424
320	6.39	34.05	1.65	2.77	250	7.40	34.01	1.79	2.66	26.61	148.0	0.501
398	5.60	34.08	1.11	2.94	300	6.68	34.01	1.67	2.75	26.71	139.0	0.572
474	5.38	34.20	0.55	3.17	400	5.60	34.08	1.10	2.95	26.90	121.5	0.702
634	4.81	34.34	0.34	3.32	500	5.27	34.23	0.46	3.21	27.06	107.5	0.817
808	4.37	34.43	0.41	3.34	600	4.92	34.32	0.34	3.30	27.17	97.8	0.920
1002	3.88	34.45	0.62	3.29	700	4.62	34.38	0.35	3.34	27.25	90.6	1.013
					800	4.35	34.43	0.40	3.34	27.32	84.5	1.102
					1000	3.87	34.45	0.61	3.29	27.38	79.3	1.265
83.70	HORIZON; April 12, 1950; 0310 GCT; 33°13'N, 121°24'W; sounding, 2,300 fm; wind, 320°, force 6; weather, clear; sea, rough; wire angle, 48°.											
0	13.44	33.28	5.76	0.45	0	13.44	33.28	5.76	0.45	24.99	297.8	0.000
8	13.46	33.28	5.88	0.52	10	13.48	33.28	5.88	0.52	24.99	298.6	0.030
22	13.49	33.28	5.88	0.46	20	13.50	33.28	5.88	0.46	24.98	299.1	0.060
44	13.42	33.28	5.78	0.46	30	13.48	33.28	5.86	0.46	24.99	299.2	0.090
64	13.03	33.28	5.83	0.56	50	13.35	33.28	5.80	0.48	25.01	297.1	0.149
85	11.93	33.28	5.57	0.81	75	12.43	33.28	5.74	0.66	25.19	280.5	0.221
123	10.09	33.48	4.26	1.60	100	11.15	33.32	5.14	1.14	25.46	255.1	0.288
158	8.76	33.77	3.26	2.02	150	9.05	33.72	3.43	1.94	26.13	192.2	0.040
224	7.55	34.00	2.74	2.32	200	7.86	33.94	2.86	2.24	26.49	159.0	0.488
290	7.18	34.09	1.37	2.88	250	7.38	34.05	2.13	2.50	26.64	144.8	0.564
365	6.40	34.09	1.01	2.90	300	7.08	34.09	1.30	2.88	26.71	138.6	0.635
438	5.80	34.16	0.80	3.07	400	6.10	34.11	0.90	2.94	26.86	125.4	0.767
590	4.88	34.22	0.46	3.27	500	5.37	34.19	0.64	3.17	27.01	111.7	0.885
744	4.44	34.34	0.31	3.46a)	600	4.86	34.23	0.44	3.28	27.10	103.6	0.993
932	3.96	34.45	0.55	3.43	700	4.57	34.30	0.32	3.42	27.19	95.7	1.093
					800	4.28	34.38	0.36	3.46	27.29	87.4	1.184
					1000	(3.78)	(34.46)			(27.40)	(77.5)	(1.349)
83.80	HORIZON; April 11, 1950; 2043 GCT; 32°56'N, 122°05'W; sounding, 2,500 fm; wind, 290°, force 5; weather, partly cloudy; sea, rough; wire angle, 36°.											
0	14.14	33.24	5.11	0.51	0	14.14	33.24	5.11	0.51	24.82	314.3	0.000
9	14.15	33.21	5.88r	0.46	10	14.15	33.21	5.09	0.46	24.79	316.9	0.032
25	14.06	33.22	5.08	0.47	20	14.10	33.21	5.08	0.46	24.80	316.1	0.063
50	11.93	33.25	5.14	0.76	30	13.98	33.22	5.09	0.49	24.84	313.4	0.095
74	11.05	33.30	4.80	1.12	50	11.93	33.25	5.14	0.76	25.26	273.1	0.153
99	9.96	33.40	4.08	1.59	75	10.97	33.30	4.76	1.14	25.48	253.0	0.219
144	8.94	33.68	3.20	2.03	100	9.95	33.40	4.04	1.59	25.73	229.1	0.279
191	8.24	33.92	2.68	2.25	150	8.83	33.72	3.13	2.06	26.16	188.9	0.384
282	7.09	34.05	1.94	2.61	200	8.12	33.94	2.62	2.28	26.45	162.9	0.472
371	6.22	34.05	1.24	3.05	250	7.46	34.02	2.19	2.47	26.61	148.3	0.550
466	5.44	34.16	0.72	3.27	300	6.93	34.05	1.78	2.71	26.70	139.8	0.622
560	4.88	34.22	0.47	3.34	400	5.98	34.06	1.05	3.14	26.84	127.7	0.755
758	4.48	34.36	0.41	3.35	500	5.23	34.20	0.62	3.30	27.04	109.2	0.874
959	3.82	34.47	0.54	3.36	600	4.77	34.23	0.44	3.34	27.11	102.5	0.980
1161	3.36	34.51	0.78	3.31	700	4.59	34.31	0.41	3.34	27.20	95.2	1.079
					800	4.32	34.40	0.44	3.35	27.30	86.4	1.169
					1000	3.73	34.48	0.57	3.36	27.42	75.5	1.331

a) Alternate value, 3.35 μg at/L, not used in interpolation.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
HORIZON; April 11, 1950; 1430, 1456 GCT; 32°29'N, 122°46.5'W; sounding, 2,410 fm; wind, 320°, force 2; partly cloudy; sea, rough; wire angle, 18°, 22°.													8390
0	14.19	33.11	5.30	0.44	0	14.19	33.11	5.30	0.44	24.71	324.8	0.000	
10	14.22	33.15	5.68	0.61r	10	14.22	33.15	5.68	0.45	24.73	322.9	0.032	
24	14.21	33.12	5.55	0.46	20	14.22	33.13	5.57	0.46	24.72	324.3	0.065	
52	12.92	33.04	5.79	0.57	30	14.18	33.11	5.56	0.48	24.71	325.3	0.097	
76	11.98	33.19	5.70	0.67a)	50	13.05	33.04	5.78	0.56	24.89	308.9	0.161	
103	10.92	33.22	5.40	1.01	75	11.97	33.19	5.71	0.67	25.21	278.6	0.234	
152	9.13	33.66	4.37	1.56	100	10.97	33.22	5.45	0.96	25.42	259.4	0.301	
					150	9.20	33.64	4.42	1.54	26.04	200.7	0.417	
200	8.56	33.87	2.64	2.23	200	8.56	33.87	2.64	2.23	26.32	174.6	0.510	
296	6.79	33.96	2.63	2.35	250	7.32	33.94	2.64	2.31	26.56	152.2	0.591	
395	6.16	34.16	0.98	3.06	300	6.77	33.97	2.63	2.35	26.66	143.4	0.666	
491	5.54	34.22	0.60	3.21b)	400	6.14	34.17	0.94	3.07	26.90	121.6	0.799	
588	5.06	34.25	0.39	3.30	500	5.50	34.22	0.59	3.22	27.02	111.0	0.915	
783	4.36	34.38	0.38	3.35	600	5.00	34.26	0.39	3.31	27.11	102.9	1.022	
981	3.75	34.43	0.62	3.23	700	4.64	34.32	0.38	3.34	27.20	95.1	1.121	
1179	3.32	34.51	0.85	3.26	800	4.28	34.39	0.40	3.35	27.30	86.6	1.212	
					1000	3.71	34.43	0.64	3.23	27.38	79.0	1.377	
HORIZON; April 9, 1950; 2341 GCT; 33°50'N, 118°37'W; sounding, 260 fm; wind, 270°, force 5; weather, partly cloudy; sea, moderate; wire angle, 24°.													8735
0	14.03	33.57	6.50	0.44	0	14.03	33.57	6.50	0.44	25.10	287.6	0.000	
9	13.35	33.55	6.21	0.58	10	13.34	33.55	6.21	0.58	25.22	276.2	0.028	
23	12.97	33.56	5.78	0.71	20	12.98	33.56	5.97	0.68	25.30	268.8	0.055	
45	10.34	33.69	3.50	1.71	30	12.00	33.61	4.88	0.90	25.53	247.2	0.081	
68	9.41	33.81	2.90	1.97	50	10.09	33.72	3.34	1.80	25.96	206.7	0.127	
91	9.06	33.91	2.58	2.15	75	9.32	33.84	2.80	2.02	26.18	186.2	0.176	
142	8.58	34.07	1.99	2.44	100	8.95	33.95	2.49	2.23	26.33	172.8	0.220	
189	8.38	34.14	1.64	2.52	150	8.52	34.09	1.92	2.46	26.50	156.8	0.303	
235	8.86r	34.18	1.42	2.61	200	8.36	34.15	1.56	2.54	26.57	150.8	0.380	
282	7.94	34.16	1.42	2.74	250	8.17	34.18	1.41	2.65	26.63	146.8	0.454	
334	7.52	34.22	0.29r	2.86	300	7.83	34.17		2.79	26.67	143.4	0.527	
HORIZON; April 10, 1950; 0338 GCT; 33°40'N, 118°58'W; sounding, 550 fm; wind, 300°, force 5; weather, partly cloudy; sea, very rough; wire angle, 9°.													8740
0	13.81	33.55	5.43	0.50	0	13.81	33.55	5.43	0.50	25.12	285.1	0.000	
10	13.84	33.57	5.97	0.46	10	13.84	33.57	5.97	0.46	25.13	284.6	0.028	
24	12.55c)	33.62	5.65	0.81	20	13.85	33.61	5.80	0.66	25.16	281.9	0.057	
49	10.42	33.64	3.74	1.53	30	11.62	33.63	5.30	0.99	25.62	239.0	0.083	
74	9.79	33.73	3.02	1.77	50	10.41	33.64	3.72	1.51	25.84	218.4	0.129	
98	9.22	33.89	2.55	2.11	75	9.74	33.73	3.00	1.78	26.02	201.1	0.181	
153	8.54	34.11	1.88	2.43	100	9.18	33.90	2.51	2.12	26.25	180.1	0.229	
201	7.96	34.14	1.29	2.69	150	8.57	34.10	1.90	2.42	26.50	156.9	0.313	
247	8.28r	34.17	1.07	2.74	200	7.98	34.14	1.31	2.69	26.62	145.9	0.389	
296	7.28	34.22	0.83	2.82	250	7.58	34.17	1.06	2.74	26.70	139.0	0.460	
350	6.90	34.29	0.57	3.10	300	7.27	34.23	0.80	2.83	26.80	130.8	0.528	
399	6.64	34.29	0.45	3.11	400	6.62	34.29	0.44	3.11	26.93	119.1	0.652	
498	5.93	34.33	0.33	3.22	500	5.90	34.33	0.32	3.23	27.06	107.9	0.766	
603	5.54	34.33	0.29	3.30	600	5.55	34.33	0.29	3.30	27.10	104.8	0.872	
703	5.22	34.40	0.37	3.31	700	5.21	34.40	0.37	3.31	27.20	96.5	0.973	

a) Alternate value, 0.82 μg at/L, not used in interpolation.
b) Alternate value, 3.20 μg at/L, not used in interpolation.
c) Alternate value, 11.94°C, not used in interpolation.

SIO

CCOFI 5004

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

87.60 HORIZON; April 10, 1950; 1340 GCT; 32°55'N, 120°22'W; sounding, 500 fm; wind, 270°, force 4; weather, partly cloudy; sea, very rough; wire angle, 34°.

0	12.76	33.34	5.84	0	12.76	33.34	5.84	25.18	280.1	0.000
9	12.81	33.35	6.11	10	12.81	33.35	6.11	25.17	280.8	0.028
21	12.80	33.33	5.95	20	12.80	33.33	5.96	25.16	282.3	0.056
42	12.72	33.34	6.11	30	12.79	33.33	6.02	25.16	282.2	0.084
62	12.12	33.37	5.76	50	12.50	33.35	6.05	25.23	275.9	0.140
82	11.38	33.44	5.40	75	11.62	33.41	5.49	25.45	256.2	0.207
125	10.16	33.55	4.58	100	10.87	33.49	5.07	25.64	237.9	0.268
162	8.99	33.66	3.82	150	9.33	33.61	4.04	26.00	204.7	0.379
199	8.95r	33.94	3.23	200	8.40	33.94	3.22	26.40	166.9	0.472
235	7.90	34.02	2.50	250	7.63	34.02	2.39	26.58	150.9	0.552
275	7.25	34.00	2.87	300	7.05	34.01	2.17	26.65	144.2	0.625
312	6.90	34.02	2.09	400	5.76	34.14	1.02	26.93	119.1	0.757
391	5.78	34.13	1.08	500	5.63	34.27	0.56	27.04	109.1	0.871
482	5.68	34.25	0.62							
576	5.50	34.31	0.40							

87.70 HORIZON; April 10, 1950; 1953 GCT; 32°39'N, 121°06'W; sounding, 2,030 fm; wind, 320°, force 4; weather, cloudy; sea, very rough; wire angle, 8°.

0	14.84	33.39	4.78	0.46	0	14.84	33.39	4.78	0.46	24.79	317.3	0.000
10	14.70	33.33	5.05	0.44	10	14.70	33.33	5.05	0.44	24.77	319.1	0.032
25	14.25	33.27	5.09	0.46	20	14.60	33.29	5.08	0.45	24.76	320.3	0.064
54	13.12	33.25	5.26	0.54	30	13.97	33.27	5.14	0.47	24.88	309.5	0.095
79	11.56	33.31	5.26	0.76	50	13.22	33.25	5.26	0.52	25.02	296.7	0.156
109	11.09	33.42	4.50	1.09	75	11.75	33.29	5.28	0.72	25.33	267.3	0.226
163	9.04	33.69	3.30	1.73	100	10.77	33.39	4.90	1.00	25.58	243.5	0.290
218	8.10	33.97	2.51	2.29	150	9.32	33.63	3.44	1.60	26.02	203.1	0.402
325	7.29r	34.07	1.39	2.76	200	8.35	33.88	2.79	2.15	26.36	170.7	0.495
439	5.96	34.17	0.83	3.06	250	(7.66)	34.03	2.11	2.47	(26.58)	(150.5)	(0.575)
547	5.16	34.22	0.51	3.23	300	(7.07)	34.06	1.59	2.67	(26.69)	(140.6)	(0.648)
655	5.02	34.36	0.29	3.24	400	(6.29)	34.11	0.97	2.97	(26.84)	(128.0)	(0.783)
866	4.28	34.43	0.47	3.26	500	5.37	34.22	0.66	3.18	27.04	109.5	(0.902)
1077	3.66	34.47	0.52	3.15	600	5.10	34.26	0.36	3.23	27.10	104.3	(1.009)
1280	3.20	34.51	0.86	-	700	4.88	34.40	0.31	3.26	27.24	92.1	(1.107)
					800	4.50	34.42	0.43	3.27	27.30	86.8	(1.196)
					1000	3.86	34.44	0.51	3.21	27.38	80.0	(1.363)

87.80 HORIZON; April 11, 1950; 0206 GCT; 32°18.5'N, 121°41'W; sounding, 2,420 fm; wind, 270°, force 3; weather, partly cloudy; sea, very rough; wire angle, 43°.

0	14.15	33.26	5.61	0.48	0	14.15	33.26	5.61	0.48	24.83	312.9	0.000
8	14.20	33.24	5.57	0.43	10	14.20	33.24	5.60	0.43	24.81	315.7	0.031
19	14.14	33.26	5.68	0.45	20	14.14	33.26	5.68	0.45	24.83	313.5	0.063
41	13.88	33.26	5.52	0.40	30	14.03	33.26	5.59	0.43	24.86	311.5	0.094
59	13.43	33.22	5.86	0.60	50	13.75	33.23	5.63	0.50	24.89	308.4	0.156
81	11.89	33.26	5.76	0.72	75	12.11	33.25	5.81	0.69	25.23	276.8	0.229
119	10.39	33.35	4.67	1.30	100	11.05	33.30	5.50	0.93	25.46	254.9	0.296
156	9.14	33.68	3.30	1.92	150	9.31	33.65	3.43	1.87	26.03	201.6	0.410
229	8.70r	33.98	2.42	2.21	200	(8.33)	33.89	2.69	2.13	(26.37)	(169.7)	(0.503)
305	7.24	34.04	1.89	2.46	250	(7.74)	34.01	2.26	2.27	(26.56)	(153.1)	(0.583)
377	6.32	34.08	1.29	2.75	300	(7.27)	34.04	1.92	2.44	(26.65)	(144.8)	(0.658)
450	5.82	34.13	0.73	2.97	400	6.16	34.10	1.04	2.83	26.84	127.0	(0.794)
602	5.02	34.25	0.39	3.12	500	5.51	34.17	0.54	3.04	26.98	115.0	(0.915)
772	4.43	34.40	0.36	3.25	600	5.03	34.25	0.39	3.12	27.10	104.3	(1.025)
960	3.84	34.45	0.55	3.27	700	4.65	34.35	0.35	3.22	27.22	93.0	(1.123)
					800	4.33	34.45	0.37	3.26	27.34	82.9	(1.211)
					1000	(3.72)	(34.45)	(0.58)	(3.26)	(27.40)	(77.6)	(1.371)

OBSERVED					INTERPOLATED					COMPUTED			S10
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	CCOFI 5004
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
HORIZON; April 11, 1950; 0828, 0852 GCT; 31°54.5'N, 122°22'W; sounding, 2,475 fm; wind, 340°, force 3; weather, partly cloudy; sea, very rough; wire angle, 30°, 30°.													87.90
0	15.24	33.38	5.19	0.38	0	15.24	33.38	5.19	0.38	24.69	326.5	0.000	
9	15.30	33.37	5.74r	0.45	10	15.30	33.37	5.18	0.45	24.67	328.9	0.033	
22	15.29	33.34	5.16	0.47	20	15.30	33.34	5.16	0.47	24.65	331.2	0.066	
47	15.46	33.50	5.03	0.46	30	15.34	33.35	5.11	0.47	24.65	331.4	0.099	
67	15.33	33.48	5.27	0.44	50	15.46	33.50	5.04	0.45	24.74	323.5	0.164	
					75	15.36	33.54	5.26	0.44	24.79	319.2	0.245	
91	15.46	33.73	5.17	0.46	100	15.41	33.76	5.17	0.47	24.95	304.9	0.323	
133	13.94	33.85	5.24	0.53	150	12.20	(33.88)	5.09	0.63	(25.70)	(233.6)	(0.457)	
173	10.78	33.64r	4.70	1.01	200	9.68	(33.94)	4.39	1.34	(26.20)	(186.7)	(0.563)	
252	8.58	33.98	4.00	1.60	250	8.63	(33.98)	4.04	1.59	(26.40)	(168.4)	(0.651)	
335	7.70	-	1.86	2.51	300	8.10	34.02	2.77	2.04	26.51	158.2	(0.732)	
415	6.46	34.10	1.22	2.80	400	6.67	34.09	1.28	2.77	26.77	134.4	(0.879)	
494	5.76	34.16	0.72	3.62r	500	5.72	34.17	0.69	3.03	26.95	117.6	(1.005)	
633	5.08	34.27	0.39	3.31	600	5.22	34.25	0.43	3.24	27.08	106.6	(1.117)	
749	4.59	34.34	0.31	3.46	700	4.79	34.31	0.31	3.41	27.18	97.7	(1.219)	
899	4.06	34.45	0.49	3.55	800	4.39	34.38	0.36	3.50	27.28	88.6	(1.312)	
					1000	(3.70)	(34.47)			(27.42)	(75.9)	(1.477)	
HORIZON; April 9, 1950; 1830 GCT; 33°24'N, 117°55'W; sounding, 370 fm; wind, 320°, force 1; weather, partly cloudy; sea, rough; wire angle, 11°.													90.30
0	14.00	33.48	5.64	0.49	0	14.00	33.48	5.64	0.49	25.03	293.9	0.000	
10	13.87	33.48	5.68	0.47	10	13.87	33.48	5.68	0.47	25.06	291.5	0.029	
25	13.86	33.48	5.89	0.56	20	13.87	33.48	5.89	0.50	25.06	291.7	0.058	
50	10.96	33.44	4.86	1.21	30	13.75	33.48	5.88	0.62	25.08	289.8	0.088	
73	10.12	33.66	3.25	1.94	50	10.96	33.44	4.86	1.21	25.59	241.9	0.141	
96	9.28	33.82	2.83	2.13	75	10.05	33.71	3.19	1.96	25.96	207.4	0.197	
149	8.82	34.02	2.21	2.46	100	9.26	33.84	2.78	2.15	26.19	185.7	0.246	
197	8.34	34.14	1.61	2.60	150	8.81	34.02	2.20	2.46	26.40	166.5	0.334	
246	8.62r	34.17	1.32	2.80	200	8.27	34.14	1.58	2.61	26.58	150.3	0.414	
295	7.44	34.21	1.07	2.97	250	7.78	34.17	1.31	2.81	26.68	141.8	0.486	
349	7.12	34.23	0.75	3.13	300	7.43	34.21	1.02	2.98	26.76	134.7	0.556	
398	6.76	34.25	0.68	3.18	400	6.76	34.25	0.69	3.18	26.88	123.9	0.684	
HORIZON; April 9, 1950; 1400 GCT; 33°11'N, 118°23'W; sounding, 750 fm; wind, 220°, force 4; weather, partly cloudy; sea, rough; wire angle, 41°.													90.37
0	14.05	33.47	5.73	0.39	0	14.05	33.47	5.73	0.39	25.02	295.5	0.000	
8	14.09	33.48	5.86	0.41	10	14.09	33.48	5.87	0.41	25.01	295.9	0.030	
19	13.38	33.48	5.87	0.43	20	13.37	33.48	5.87	0.44	25.16	282.1	0.058	
37	11.04	33.49	4.54	1.12	30	11.75	33.48	5.55	0.66	25.48	252.3	0.085	
55	10.03	33.60	3.44	1.62	50	10.23	33.54	3.59	1.56	25.79	222.5	0.133	
72	9.57	33.69	3.34	1.80	75	9.48	33.71	3.29	1.82	26.05	198.2	0.185	
113	8.90	33.89	2.64	2.04	100	9.05	33.83	2.75	1.98	26.22	183.2	0.233	
148	8.45	34.02	2.32	2.20	150	(8.43)	34.03	2.31	2.21	(26.47)	(160.0)	(0.319)	
220	8.50r	34.14	1.61	2.47	200	(7.98)	34.11	1.82	2.40	(26.60)	(148.1)	(0.396)	
296	7.27	34.21	0.97	2.78	250	(7.57)	34.17	1.32	2.61	(26.71)	(138.8)	(0.467)	
370	6.76	34.27	0.65	2.96	300	7.24	34.21	0.95	2.79	26.79	131.9	(0.536)	
452	6.21	34.29	0.41	3.01	400	6.55	34.28	0.54	2.99	26.94	118.8	(0.660)	
530	5.79	34.33	0.33	3.07	500	5.96	34.31	0.35	3.04	27.04	110.1	(0.775)	
617	5.31	34.36	0.30	3.18	600	5.41	34.36	0.30	3.16	27.14	100.9	(0.881)	
800	4.60	34.43	0.49	3.25	700	4.95	34.39	0.36	3.23	27.22	93.8	(0.978)	
					800	4.60	34.43	0.49	3.25	27.29	87.5	(1.069)	

S10

CCOFI 5004

OBSERVED					INTERPOLATED					COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m
90.45	HORIZON; April 9, 1950; 0840 GCT; 32°54'N, 118°56'W; sounding, 950 fm; wind, 290°, force 5; weather, partly cloudy; sea, very rough; wire angle, 28°.											
0	12.84	33.59	5.37	0.79	0	12.84	33.59	5.37	0.79	25.35	263.5	0.000
9	12.87	33.60	5.22	0.76	10	12.87	33.60	5.22	0.76	25.35	263.6	0.026
22	12.86	33.60	5.14	0.81	20	12.86	33.60	5.15	0.80	25.36	263.6	0.053
44	10.65	33.69	2.98	1.60	30	12.85	33.61	4.75	1.00	25.37	262.8	0.079
66	9.94	33.73	2.79	1.87	50	10.35	33.71	2.91	1.74	25.91	211.8	0.126
87	9.75	33.78	2.64	1.95	75	9.86	33.74	2.74	1.91	26.01	202.1	0.178
134	8.88	34.04	2.01	2.24	100	9.50	33.82	2.50	2.01	26.14	190.9	0.227
177	8.74	34.09	1.91	2.28	150	8.85	34.06	1.96	2.27	26.43	164.0	0.316
263	7.80	34.20	1.24	2.60	200	8.48	34.11	1.82	2.31	26.52	155.7	0.396
353	7.00	34.22	0.76	2.87	250	7.97	34.18	1.37	2.54	26.66	143.6	0.471
439	6.36	34.25	0.42	3.02	300	7.47	34.21	0.97	2.74	26.75	135.1	0.541
530	5.76	34.36	0.33	3.22	400	6.63	34.23	0.56	2.95	26.88	123.7	0.669
619	5.47	34.36	0.32	3.18	500	5.94	34.32	0.33	3.19	27.05	109.2	0.786
715	5.06	34.40	0.33	3.19	600	5.54	34.36	0.32	3.20	27.13	102.5	0.893
904	4.27	34.51	0.46	3.20	700	5.13	34.39	0.32	3.18	27.20	96.1	0.992
					800	4.63	34.46	0.38	3.21	27.31	85.7	1.083
					1000	(4.08)	(34.55)			(27.44)	(74.5)	(1.243)
90.53	HORIZON; April 9, 1950; 0344 GCT; 32°36'N, 119°28'W; sounding, 400 fm; wind, 290°, force 5; weather, partly cloudy; sea, high; wire angle, 18°.											
0	13.22	33.51	5.54	0.52	0	13.22	33.51	5.54	0.52	25.21	276.6	0.000
10	13.26	33.57	6.05	0.50	10	13.26	33.57	6.05	0.50	25.25	273.1	0.027
24	12.54	33.53	5.79	0.67	20	13.23	33.54	5.90	0.66	25.24	274.9	0.055
47	10.32	33.64	4.16	1.50	30	11.75	33.54	5.20	0.71	25.52	247.9	0.081
71	9.47	33.69	3.57	1.70	50	10.15	33.64	4.06	1.54	25.89	213.8	0.127
94	9.20	33.80	2.83	1.95	75	9.44	33.70	3.50	1.73	26.05	198.5	0.179
146	8.32	34.11	1.89	2.36	100	9.08	33.86	2.68	2.01	26.24	181.2	0.226
193	7.86	34.14	1.56	2.52	150	8.25	34.11	1.84	2.38	26.56	151.3	0.309
241	7.56	34.18	1.35	2.64	200	7.82	34.14	1.53	2.54	26.65	143.8	0.383
288	7.14	34.22	1.03	2.82	250	7.49	34.19	1.28	2.68	26.74	136.0	0.453
340	6.69	34.22	0.78	2.84	300	7.03	34.22	0.97	2.83	26.82	128.3	0.519
388	6.50	34.23	0.60	2.90	400	6.42	34.24	0.56	2.92	26.92	120.1	0.644
436	6.22	34.28	0.48	2.98	500	5.87	34.35	0.41	3.04	27.07	105.8	0.757
485	5.93	34.35	0.40	3.04	600	(5.60)	(34.39)	(0.38)	(3.08)	(27.14)	(101.1)	(0.860)
587	5.68	34.38	0.38	3.08								
90.60	HORIZON; April 8, 1950; 2345 GCT; 32°26'N, 119°56'W; sounding, 450 fm; wind, 220°, force 3; weather, cloudy; sea, very rough; wire angle, 16°.											
0	13.93	33.22	5.19	0.49	0	13.93	33.22	5.19	0.49	24.85	311.2	0.000
10	13.96	33.30	5.54	0.48	10	13.96	33.30	5.54	0.48	24.91	306.3	0.031
24	13.66	33.29	5.48	0.55	20	13.75	33.29	5.51	0.52	24.94	303.4	0.061
48	11.81	33.38	5.33	0.83	30	13.07	33.29	5.44	0.60	25.08	290.5	0.091
72	10.95	33.53	5.16	1.26	50	11.70	33.40	5.31	0.90	25.42	257.9	0.146
96	10.08	33.69	4.06	1.72	75	10.83	33.54	5.12	1.33	25.69	233.0	0.207
150	8.42	33.91	2.75	2.11	100	9.85	33.71	3.87	1.76	25.99	204.6	0.262
198	8.18	34.11	1.59	2.54	150	8.42	33.91	2.75	2.11	26.38	168.7	0.355
246	7.65	34.36r	1.50	2.66	200	8.18	34.12	1.59	2.54	26.58	150.4	0.435
295	7.40	34.16	1.31	2.80	250	7.62	34.16	1.49	2.67	26.69	140.4	0.508
348	6.97	34.18	1.21	2.77	300	7.35	34.16	1.30	2.80	26.73	137.1	0.577
397	6.52	34.23	0.78	2.90	400	6.51	34.23	0.78	2.91	26.90	122.0	0.706
446	6.28	34.26	0.57	2.98	500	5.92	34.27	0.44	3.16	27.01	112.7	0.824
494	5.96	34.27	0.45	3.15	600	(5.38)	(34.36)	(0.35)	(3.26)	(27.15)	(100.4)	(0.930)
598	5.38	34.36	0.35	3.26								

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

90.70

HORIZON; April 8, 1950; 1732, 1813 GCT; 32°06'N, 120°37'W; sounding, 2,250 fm; wind, 220°, force 3; weather, rain; sea, rough; wire angle, 16°, 19°.

0	15.02	33.38	5.54	0.48	0	15.02	33.38	5.54	0.48	24.73	322.4	0.000
10	14.98	33.40	5.62	0.43	10	14.98	33.40	5.62	0.43	24.77	319.1	0.032
24	13.36	33.22	5.65	0.52	20	13.42	33.22	5.64	0.50	24.95	302.1	0.063
53	13.10	33.29	5.81	0.54	30	13.29	33.22	5.68	0.53	24.98	299.8	0.093
77	12.88	33.30	5.81	0.67	50	13.12	33.28	5.79	0.54	25.06	292.6	0.152
105	12.28	33.40	5.57	0.76	75	12.89	33.30	5.81	0.64	25.12	287.4	0.225
157	9.50	33.68	4.33	1.47	100	12.51	33.37	5.63	0.74	25.25	275.7	0.295
208	8.59	33.94	4.14	1.62	150	9.69	33.62	4.43	1.34	25.95	209.5	0.417
311	6.92	34.05	2.12	2.62	200	8.70	33.92	4.14	1.60	26.34	172.9	0.512
419	6.23	34.22	0.88	3.05	250	7.79	34.00	3.68	2.04	26.54	154.5	0.594
522	5.23	34.23	0.56	3.24	300	7.03	34.04	2.40	2.53	26.68	141.7	0.668
625	5.04	34.40	0.29	3.27	400	6.36	34.20	0.99	3.02	26.90	122.2	0.800
828	4.37	34.45	0.48	3.34	500	5.39	34.22	0.62	3.21	27.03	109.6	0.916
					600	5.07	34.35	0.35	3.27	27.18	97.1	1.020
1049	3.76	34.52	0.80	3.32	700	4.77	34.45	0.35	3.30	27.29	87.1	1.112
1250	3.23	34.52	0.89	3.30	800	4.44	34.45	0.47	3.33	27.33	84.1	1.197
					1000	3.88	34.50	0.71	3.32	27.42	75.7	1.357

90.80

HORIZON; April 8, 1950; 1119 GCT; 31°47'N, 121°15'W; sounding, 2,430 fm; wind, 250°, force 4; weather, partly cloudy; sea, rough; wire angle, 31°.

0	15.61	33.55	5.04	0.40	0	15.61	33.55	5.04	0.40	24.74	321.9	0.000
8	15.65	33.55	4.79	0.37	10	15.65	33.53	4.78	0.37	24.72	324.2	0.032
21	15.51	33.50	5.01	0.40	20	15.53	33.50	5.01	0.40	24.72	324.0	0.065
47	15.44	33.53	4.97	0.34	30	15.49	33.50	5.01	0.39	24.73	323.4	0.097
68	15.39	33.57	4.81	0.36	50	15.44	33.53	4.94	0.34	24.76	320.9	0.161
93	14.82	33.75	4.94	0.34	75	15.38	33.62	4.81	0.36	24.84	313.9	0.241
138	13.02	33.68	4.47	0.60	100	14.45	33.75	4.89	0.34	25.15	285.6	0.316
182	9.90	33.73	4.11	1.22	150	11.83	33.68	4.36	0.79	25.62	241.7	0.448
266	7.99	33.96	3.66	1.68	200	9.30	33.77	4.03	1.35	26.13	193.3	0.557
350	6.68	34.00	1.93	2.42	250	8.20	33.91	3.79	1.61	26.41	167.1	0.646
431	5.87	34.09	1.21	2.74	300	7.42	33.99	2.94	2.04	26.59	150.7	0.725
512	5.77	34.23	0.49	2.96	400	6.08	34.04	1.45	2.64	26.81	130.4	0.866
677	4.75	34.40	0.36	3.02a)	500	5.79	34.21	0.52	2.94	26.98	115.4	0.989
854	4.17	34.45	0.45	3.11	600	5.16	34.34	0.40	3.00	27.16	99.1	1.096
1042	3.78	34.52	0.64	3.10	700	4.66	34.41	0.36	3.04	27.27	88.7	1.190
					800	4.31	34.44	0.41	3.09	27.33	83.3	1.276
					1000	3.86	34.50	0.59	3.11	27.43	75.5	1.436

90.90

HORIZON; April 8, 1950; 0506 GCT; 31°25'N, 121°59'W; sounding, 2,200 fm; wind, 220°, force 4; weather, partly cloudy; sea, rough; wire angle, 26°.

0	15.26	33.29	5.51	0.42	0	15.26	33.29	5.51	0.42	24.62	333.2	0.000
9	15.29	33.28	5.15	0.40	10	15.30	33.28	5.15	0.40	24.60	335.2	0.033
22	15.85	33.62	5.37	0.40	20	15.85	33.62	5.36	0.40	24.74	322.3	0.066
44	15.69	33.58	5.08	0.39	30	15.80	33.61	5.29	0.40	24.74	322.2	0.098
65	15.53	33.48	5.21	0.36	50	15.63	33.54	5.08	0.38	24.73	324.2	0.163
86	15.35	33.48	5.05	0.38	75	15.48	33.42	5.14	0.37	24.67	330.5	0.245
130	13.60	33.68	5.00	0.53	100	15.19	33.56	5.03	0.41	24.84	314.9	0.326
170	10.88	33.73	4.66	0.99	150	12.04	33.70	4.89	0.69	25.59	244.0	0.465
252	8.26	33.96	3.41	1.79	200	9.65	33.84	3.97	1.38	26.13	193.7	0.575
337	7.06	34.02	2.21	2.27	250	8.30	33.96	3.44	1.77	26.43	164.8	0.665
418	6.02	34.09	1.39	2.54	300	7.58	33.99	2.80	2.06	26.56	153.0	0.744
503	5.46	34.16	0.83	2.92	400	6.19	34.07	1.56	2.49	26.82	129.6	0.885
672	4.86	34.33	0.37	3.09	500	5.47	34.16	0.85	2.90	26.98	115.1	1.007
842	4.36	34.48	0.48	3.20	600	5.10	34.26	0.48	3.06	27.10	104.3	1.117
1032	3.81	34.54	0.65	3.12	700	4.77	34.36	0.37	3.11	27.22	93.7	1.216
					800	4.46	34.45	0.44	3.17	27.32	84.2	1.305
					1000	3.90	34.54	0.63	3.14	27.45	73.0	1.462

a) Alternate value, 3.22 μg at/L, not used in interpolation.

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
90.100	HORIZON; April 7, 1950; 2253 GCT; 31°03'N, 122°42'W; sounding, 2,420 fm; wind, 270°, force 3; weather, partly cloudy; sea, rough; wire angle, 7°.											
0	15.66	33.42	5.37	0.44	0	15.66	33.42	5.37	0.44	24.63	332.1	0.000
10	15.46	33.46	5.17	0.41	10	15.46	33.46	5.17	0.41	24.71	325.3	0.033
25	15.27	33.44	5.51	0.43	20	15.33	33.45	5.50	0.43	24.73	323.5	0.065
50	14.94	33.39	5.11	0.38	30	15.20	33.42	5.48	0.43	24.73	323.2	0.098
75	14.84	33.39	5.37	0.42	50	14.94	33.39	5.11	0.38	24.77	320.6	0.162
100	14.21	33.42	5.17	0.44	75	14.84	33.39	5.37	0.42	24.79	319.2	0.242
154	12.43	33.44	5.01	0.68	100	14.21	33.42	5.17	0.44	24.94	305.0	0.320
202	9.64	33.64	3.71	1.52	150	12.65	33.43	5.01	0.66	25.27	275.2	0.465
300	7.77	33.97	2.93	1.98	200	9.67	33.62	3.74	1.50	25.95	210.3	0.587
403	6.46	34.05	1.68	2.63	250	8.65	33.85	3.33	1.82	26.29	178.4	0.684
501	5.76	34.20	0.73	2.96	300	7.77	33.97	2.93	1.98	26.52	157.2	0.767
603	5.46	34.27	0.38	-	400	6.49	34.04	1.71	2.59	26.76	135.7	0.914
803	4.48	34.34	0.43	-	500	5.76	34.20	0.74	2.96	26.97	115.8	1.040
1000	3.90	34.47	0.59	-	600	5.45	34.27	0.38		27.07	108.0	1.152
1203	3.40	34.52	0.80	-	700	4.99	34.30	0.40		27.15	100.8	1.256
					800	4.47	34.34	0.42		27.24	92.5	1.353
					1000	3.90	34.47	0.59		27.40	78.2	1.523
90.110	HORIZON; April 7, 1950; 1640 GCT; 30°39'N, 123°24'W; sounding, 2,155 fm; wind, 240°, force 2; weather, overcast; sea, rough; wire angle, 14°.											
0	15.81	33.55	5.56	0.38	0	15.81	33.55	5.56	0.38	24.70	326.0	0.000
10	15.84	33.53	5.56	0.33	10	15.84	33.53	5.56	0.33	24.67	328.5	0.033
25	15.68	33.56	5.65	0.35	20	15.71	33.55	5.64	0.34	24.72	324.1	0.065
50	15.64	33.64	5.54	0.39	30	15.66	33.57	5.64	0.36	24.75	322.0	0.098
73	15.67	33.64	5.52	0.32	50	15.64	33.64	5.54	0.39	24.80	317.3	0.162
97	15.66	33.68	5.49	0.38	75	15.67	33.64	5.52	0.32	24.79	318.6	0.241
149	12.08	33.47	5.11	0.74	100	15.66	33.68	5.48	0.39	24.83	316.4	0.320
197	9.60	33.68	4.20	1.43	150	11.94	33.47	5.11	0.74	25.43	259.1	0.464
290	7.88	34.02	2.91	2.09	200	9.47	33.69	4.15	1.48	26.04	201.9	0.580
389	6.78	34.11	1.40	2.58	250	8.48	34.92	3.46	1.91	26.38	170.5	0.673
484	5.98	34.20	0.81	2.84	300	7.75	34.03	2.73	2.14	26.57	152.6	0.753
585	5.48	34.31	0.41	3.03	400	6.65	34.12	1.31	2.61	26.80	132.0	0.896
782	4.60	34.40	0.37	3.08	500	5.88	34.22	0.73	2.88	26.98	115.7	1.020
978	3.97	34.49	0.55	3.16	600	5.41	34.32	0.40	3.03	27.11	103.9	1.129
1179	3.50	34.47	0.73	3.09	700	4.99	34.37	0.38	3.06	27.20	95.6	1.229
					800	4.52	34.41	0.39	3.09	27.29	87.9	1.321
					1000	3.90	34.49	0.57	3.16	27.41	76.8	1.485
90.120	HORIZON; April 7, 1950; 1027 GCT; 30°22'N, 124°02'W; sounding, 2,425 fm; wind, 240°, force 2; weather, partly cloudy; sea, moderate; wire angle, 1°.											
0	16.25	33.49	4.74	0.46	0	16.25	33.49	4.74	0.46	24.55	338.7	0.000
10	16.11	33.53	5.08	0.38	10	16.11	33.53	5.08	0.38	24.61	334.1	0.034
25	15.88	33.49	5.29	0.39	20	15.95	33.50	5.25	0.39	24.63	333.3	0.670
50	15.60	33.58	4.87	0.36	30	15.82	33.50	5.23	0.38	24.66	330.6	0.100
74	15.04	33.51	5.09	0.41	50	15.60	33.58	4.87	0.36	24.77	320.7	0.165
99	12.68	33.31	5.24	0.60	75	14.90	33.51	5.09	0.41	24.87	311.7	0.244
154	10.14	33.52	4.31	1.21	100	12.66	33.31	5.24	0.60	25.17	282.8	0.319
203	8.86	33.84	3.15	1.76	150	10.31	33.48	4.44	1.17	25.73	230.1	0.446
301	7.39	34.04	2.44	2.20	200	8.89	33.83	3.22	1.73	26.24	175.4	0.549
404	6.18	34.14	1.34	2.64	250	8.11	33.97	2.76	2.02	26.47	161.5	0.632
502	5.61	34.18	0.70	2.84	300	7.39	34.04	2.46	2.19	26.63	146.4	0.710
605	5.39	34.29	0.41	3.02	400	6.22	34.14	1.37	2.63	26.87	124.8	0.845
805	4.52	34.40	0.37	3.25	500	5.62	34.18	0.72	2.83	26.97	115.5	0.965
1002	3.94	34.47	0.59	3.14	600	5.40	34.28	0.43	3.01	27.08	106.6	1.076
1205	3.39	34.54	0.83	3.12	700	5.00	34.35	0.38	3.14	27.18	97.3	1.178
					800	4.54	34.40	0.37	3.24	27.28	89.0	1.271
					1000	3.94	34.47	0.58	3.14	27.39	78.7	1.439

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

HORIZON; April 13, 1950; 0400 GCT; 32°51'N, 117°32'W; sounding, 480 fm; wind, 360°, force 1; weather, partly cloudy; sea, slight; wire angle, 14°. 93.30

0	15.41	33.49	5.53	0.45	0	15.41	33.49	5.53	0.45	24.74	322.1	0.000
9	14.61	33.45	5.45	0.49	10	14.55	33.45	5.45	0.49	24.89	307.4	0.031
24	13.28	33.47	5.88	0.58	20	13.52	33.47	5.85	0.56	25.12	285.7	0.061
48	11.44	33.44	5.17	1.06	30	12.76	33.46	5.77	0.65	25.27	272.1	0.089
71	10.23	33.51	3.69	1.64	50	11.25	33.44	5.14	1.12	25.54	246.9	0.141
95	9.52	33.75	3.05	1.94	75	10.13	33.52	3.55	1.70	25.80	222.8	0.200
147	8.80	34.04	2.40	2.33	100	9.43	33.79	2.96	1.99	26.12	192.2	0.252
195	8.32	34.14	1.86	2.61	150	8.75	34.05	2.36	2.36	26.43	163.3	0.339
242	7.93	34.18	1.31	2.77	200	8.27	34.15	1.78	2.63	26.59	149.6	0.418
289	7.67	34.22	1.03	2.87	250	7.88	34.19	1.26	2.79	26.68	141.7	0.491
343	7.24	34.24	0.80	3.01	300	7.58	34.22	0.97	2.89	26.74	136.0	0.560
392	6.86	34.23	0.67	3.13	400	6.82	34.23	0.65	3.15	26.86	126.3	0.692
441	6.54	34.31	0.52	3.25	500	(6.25)	(34.31)	(0.40)	(3.29)	(27.00)	(114.0)	(0.812)
490	6.29	34.31	0.41	3.29								

HORIZON; April 13, 1950; 1013 GCT; 32°30'N, 118°12.5'W; sounding, 950 fm; wind, 260°, force 5; weather, overcast; sea, rough; wire angle, 29°. 93.40

0	14.23	33.58	5.78	0.51	0	14.23	33.58	5.78	0.51	25.06	291.2	0.000
9	14.21	33.60	6.08	0.47	10	14.20	33.60	6.07	0.47	25.08	289.3	0.029
26	13.06	33.53	5.65	0.77	20	13.80	33.55	5.83	0.64	25.13	285.3	0.058
53	11.50	33.57	4.78	1.10	30	12.75	33.53	5.55	0.81	25.32	266.8	0.085
80	10.14	33.64	3.55	1.64	50	11.59	33.56	4.89	1.06	25.57	243.9	0.136
106	9.20	33.77	3.10	2.00	75	10.36	33.63	3.73	1.50	25.84	218.4	0.194
132p	8.88	33.87	2.77	2.06	100	9.33	33.74	3.18	1.98	26.10	194.3	0.246
225p	7.80	34.14	1.73	2.58	150	8.64	33.94	2.56	2.10	26.37	169.6	0.337
341p	7.04	34.22	0.83	3.00	200	8.03	34.09	1.99	2.37	26.58	150.5	0.416
463p	6.14	34.30	0.46	3.12	250	7.64	34.17	1.48	2.77	26.70	139.8	0.489
580p	5.62	34.34	0.32	3.24	300	7.31	34.21	1.06	2.95	26.78	132.9	0.557
817p	4.55	34.42	0.40	3.37	400	6.57	34.25	0.61	3.04	26.91	121.3	0.684
1053p	3.78	34.49	0.70	3.36	500	5.98	34.32	0.40	3.17	27.04	109.7	0.800
1282p	3.28	34.56	0.94	3.31	600	(5.53)	(34.34)	(0.32)	(3.25)	(27.11)	(103.9)	(0.907)
					700	(5.06)	(34.37)	(0.34)	(3.31)	(27.19)	(96.6)	(1.008)
					800	(4.63)	(34.41)	(0.38)	(3.37)	(27.27)	(89.5)	(1.101)
					1000	3.92	34.48	0.61	3.36	27.40	77.7	(1.268)

HORIZON; April 13, 1950; 1626, 1730 GCT; 32°10'N, 118°53.5'W; sounding, 750 fm; wind, 340°, force 5; weather, partly cloudy; sea, very rough; wire angle, 42°, 55°. 93.50

0	14.46	33.44	5.26	0.42	0	14.46	33.44	5.26	0.42	24.90	306.2	0.000
11	14.48	33.46	5.31	0.44	10	14.49	33.46	5.31	0.44	24.91	305.5	0.030
26	14.48	33.44	5.26	0.44	20	14.49	33.44	5.29	0.44	24.90	307.1	0.061
56	12.82	33.46	5.01	0.70	30	14.48	33.44	5.24	0.45	24.90	307.2	0.092
81	10.45	33.57	3.60	2.09r	50	13.76	33.45	5.06	0.62	25.06	292.7	0.152
111	9.56	33.77	3.01	1.94	75	10.94	33.53	4.40	1.18	25.66	235.6	0.218
165	8.44	33.96	2.42	2.27	100	9.81	33.71	3.17	1.79	26.00	204.2	0.273
217	7.92	34.07	1.86	2.48	150	8.87	33.93	2.58	2.21	26.32	174.0	0.368
316	7.14	34.18	0.94	2.99	200	8.16	34.03	2.04	2.40	26.51	156.9	0.450
420	6.44	34.27	0.72	3.26	250	7.62	34.13	1.53	2.67	26.67	142.6	0.525
519	5.94	34.36	0.40	3.35	300	7.23	34.18	1.06	2.92	26.76	134.2	0.594
625	5.36	34.38	0.51	3.39	400	6.56	34.25	0.74	3.23	26.91	121.3	0.722
833	4.54	34.42	0.42	3.35	500	6.05	34.35	0.48	3.34	27.06	108.4	0.837
					600	5.48	34.38	0.47	3.38	27.15	100.1	0.941
1051	3.77	34.51	0.61	3.29	700	5.05	34.39	0.52	3.38	27.21	95.0	1.038
					800	4.66	34.41	0.46	3.36	27.27	89.8	1.131
					1000	3.97	34.48	0.59	3.31	27.40	78.1	1.299

SIO

CCOFI 5004

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

93.60 HORIZON; April 14, 1950; 0030 GCT; 31°50'N, 119°34'W; sounding, 1,030 fm; wind, 340°, force 7; weather, clear; sea, high; wire angle, 59°.

0	13.21	33.35	6.11	0.66	0	13.21	33.35	6.11	0.66	25.09	288.2	0.000
9	13.24	33.39	5.94	0.64	10	13.24	33.39	5.94	0.64	25.12	286.1	0.029
19	13.10	33.37	6.08	0.75	20	13.02	33.37	6.08	0.75	25.15	283.4	0.057
38	11.94	33.49	6.13	0.97	30	12.45	33.44	6.14	0.88	25.31	267.9	0.085
56	11.27	33.53	5.30	1.23	50	11.40	33.52	5.51	1.15	25.57	243.7	0.136
78	10.12	33.60	4.32	1.71	75	10.27	33.59	4.53	1.64	25.83	219.8	0.194
119	8.96	33.91	2.74	2.28	100	9.35	33.74	3.19	2.09	26.10	194.6	0.246
162	8.44	34.02	2.06	2.57	150	8.60	34.00	2.18	2.50	26.42	164.7	0.335
249	-	34.09	1.81	2.76	200	(8.00)	34.06	1.91	2.68	(26.56)	(152.2)	(0.415)
343	6.74	34.16	1.12	3.06	250	(7.47)	34.09	1.81	2.76	(26.66)	(143.1)	(0.489)
429	6.40	34.25	0.62	3.18	300	(7.04)	34.12	1.49	2.89	(26.74)	(136.0)	(0.558)
526	5.98	34.29	0.46	3.31	400	6.50	34.22	0.76	3.16	26.90	122.5	(0.687)
701	4.94	34.42	0.45	3.53	500	6.09	34.28	0.49	3.27	27.00	114.0	(0.805)
905	4.24	34.45	0.61	3.56	600	5.53	34.35	0.45	3.44	27.12	103.2	(0.914)
1151	3.65	34.45	0.83	3.56	700	4.95	34.42	0.45	3.53	27.24	91.6	(1.012)
					800	4.57	34.44	0.50	3.56	27.30	86.4	(1.101)
					1000	4.02	34.45	0.72	3.56	27.37	81.1	(1.269)

97.32 HORIZON; April 15, 1950; 1726 GCT; 32°11.5'N, 117°17'W; sounding, 725 fm; wind, 340°, force 4; weather, partly cloudy; sea, very rough; wire angle, 17°.

0	14.30	33.62	5.37	0.32	0	14.30	33.62	5.37	0.32	25.08	289.7	0.000
10	14.23	33.51	5.25	0.36	10	14.23	33.51	5.25	0.36	25.00	296.9	0.029
24	12.38	33.58	4.46	0.66	20	13.15	33.57	4.83	0.50	25.28	271.3	0.058
48	9.40	33.75	2.88	1.79	30	11.68	33.61	4.00	1.20	25.59	241.6	0.083
71	9.09	33.96	2.37	2.07	50	9.39	33.77	2.82	1.80	26.11	191.9	0.127
96	8.92	34.02	2.30	2.12	75	9.05	33.97	2.37	2.09	26.33	172.3	0.172
120p	8.88	34.07	2.16	2.13	100	8.93	34.03	2.29	2.13	26.39	166.6	0.215
226p	-	34.22	1.54	2.41	150	(8.60)	34.12	2.01	2.19	(26.51)	(155.9)	(0.295)
335p	7.06	34.29	0.80	2.77	200	(8.17)	34.20	1.70	2.32	(26.64)	(144.4)	(0.370)
442p	6.46	34.34	0.48	2.90	250	(7.70)	34.24	1.38	2.50	(26.74)	(135.5)	(0.440)
554p	5.88	34.39	0.30	3.20	300	(7.32)	34.27	1.03	2.66	(26.82)	(128.7)	(0.507)
674p	5.35	34.36	0.40	3.27	400	6.70	34.32	0.55	2.86	26.95	117.8	(0.630)
774p	4.86	34.45	0.53	-	500	6.13	34.37	0.37	3.05	27.06	108.0	(0.743)
988p	4.15	34.51	0.61	-	600	5.66	34.38	0.32	3.24	27.13	102.6	(0.848)
					700	5.20	34.37	0.43	3.30	27.18	98.3	(0.988)
					800	4.77	34.47	0.55	3.40	27.30	86.8	(1.041)
					1000	(4.10)	(34.51)	(0.62)	(3.38)	(27.41)	(77.5)	(1.205)

97.40 HORIZON; April 15, 1950; 1315 GCT; 31°55.5'N, 117°50'W; sounding, 378 fm; wind, 320°, force 5; weather, clear; sea, very rough; wire angle, 15°.

0	14.37	33.44	5.74	0.44	0	14.37	33.44	5.74	0.44	24.92	304.3	0.000
10	14.38	33.49	5.63	0.47	10	14.38	33.49	5.63	0.47	24.96	301.1	0.030
24	14.36	33.46	5.90	0.47	20	14.38	33.47	5.89	0.47	24.95	302.7	0.060
48	12.62	33.33	5.71	0.69	30	14.35	33.41	5.89	0.48	24.91	306.8	0.091
71	10.96	33.40	4.83	1.10	50	12.32	33.33	5.67	0.74	25.25	274.0	0.149
94	10.08	33.57	4.11	2.06	75	10.81	33.42	4.62	1.30	25.60	241.5	0.213
148	8.95	33.95	2.72	2.15	100	9.89	33.60	3.92	2.08	25.90	213.3	0.270
198	8.39	34.04	2.34	2.29	150	8.90	33.91	2.69	2.15	26.30	175.9	0.368
243	-	34.09	1.81	2.54	200	8.34	34.04	2.34	2.29	26.49	158.7	0.451
292	7.68	34.20	1.33	2.76	250	8.01	34.10	1.74	2.58	26.59	150.3	0.529
345	7.19	34.22	0.98	2.89	300	7.59	34.21	1.27	2.79	26.74	136.9	0.600
396	6.80	34.27	0.69	3.05	400	(6.77)	(34.28)	(0.67)	(3.06)	(26.91)	(121.7)	(0.729)

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

CREST; April 17, 1950; 0825 GCT; 31°41'N, 116°47'W; sounding, 280 fm; wind, 320°, force 2; weather, clear; sea, very rough; wire angle, 8°. 100.30

0	12.98	33.69	7.05	0.50	0	12.98	33.69	7.05	0.50	25.40	258.9	0.000	
10	12.95	33.68	6.51	0.55	10	12.95	33.68	6.51	0.55	25.40	259.0	0.026	
30	10.63	33.68	4.14	1.45	20	12.73	33.68	5.15	0.70	25.44	255.2	0.052	
49	9.82	33.83	3.01	1.91	30	10.63	33.68	4.14	1.45	25.83	218.6	0.075	
74	9.07	34.00	2.37	2.18	50	9.79	33.84	2.97	1.92	26.10	193.3	0.117	
98	8.74	34.05	2.18	2.36	75	9.07	34.00	2.37	2.18	26.34	170.6	0.162	
148	8.29	34.13	1.88	2.42	100	8.74	34.06	2.15	2.37	26.44	161.6	0.204	
197	8.48	34.23	1.32	2.54	150	8.29	34.13	1.85	2.42	26.57	150.5	0.281	
246	8.05	34.20	1.46	2.57	200	8.48	34.23	1.33	2.54	26.62	146.7	0.356	
296	7.80	34.23	1.07	2.64	250	8.02	34.20	1.43	2.57	26.66	143.0	0.428	
345	7.52	34.25	0.83	2.76	300	7.78	34.23	1.02	2.65	26.72	138.1	0.499	
394	7.21	34.23	0.71	2.84	400	(7.16)	(34.23)	(0.70)	(2.84)	(26.81)	(130.9)	(0.633)	

CREST; April 17, 1950; 0212 GCT; 31°20'N, 117°27'W; sounding, 1,200 fm; wind, 320°, force 3; weather, clear; sea, rough; wire angle, 27°. 100.40

0	15.74	33.49	6.00	0.51	0	15.74	33.49	6.00	0.51	24.66	329.0	0.000	
9	15.22	33.48	5.79	0.52	10	15.22	33.48	5.80	0.52	24.77	318.9	0.032	
22	14.54	33.51	5.82	0.53	20	14.70	33.51	5.82	0.52	24.91	306.2	0.064	
45	11.76	33.44	5.32	1.00	30	14.48	33.49	5.73	0.60	24.94	303.6	0.094	
67	10.72	33.64	4.19	1.52	50	11.50	33.45	5.15	1.15	25.50	250.7	0.150	
89	9.66	33.77	3.18	1.94	75	10.27	33.68	3.67	1.68	25.90	213.1	0.208	
112p	9.36	33.87	2.73	2.14	100	9.47	33.81	2.92	2.06	26.13	191.2	0.258	
205p	8.30	34.13	1.95	2.43	150	8.96	34.01	2.34	2.30	26.37	169.5	0.348	
303p	-	34.23	0.99	2.80	200	8.36	34.12	1.97	2.43	26.55	153.0	0.429	
397p	6.80	34.31	0.61	2.96	250	7.87	34.18	1.46	2.60	26.67	142.3	0.521	
480p	6.21	34.27	0.52	3.02	300	7.50	34.23	1.00	2.79	26.77	134.1	0.571	
679p	5.18	34.40	0.39	3.18	400	6.77	34.30	0.61	2.93	26.92	120.3	0.699	
879p	4.38	34.45	0.49	3.18	500	6.10	34.28	0.50	3.04	26.99	114.3	0.816	
1090p	3.70	34.52	0.69	3.11	600	5.52	34.35	0.43	3.13	27.12	103.0	0.924	
					700	5.11	34.40	0.40	3.18	27.21	95.0	1.023	
					800	4.69	34.43	0.44	3.18	27.28	88.6	1.116	
					1000	3.95	34.49	0.61	3.16	27.41	77.3	1.282	

CREST; April 16, 1950; 1959 GCT; 30°59'N, 118°08'W; sounding, 1,000 fm; wind, 320°, force 4; weather, clear; sea, very rough; wire angle, 15°. 100.50

0	15.16	33.46	5.70	0.48	0	15.16	33.46	5.70	0.48	24.77	319.0	0.000	
10	14.84	33.46	5.63	0.48	10	14.84	33.46	5.63	0.48	24.84	312.5	0.032	
25	13.78	33.42	5.79	0.49	20	14.80	33.43	5.76	0.48	24.83	313.9	0.063	
48	11.59	33.44	5.04	1.02	30	12.75	33.42	5.75	0.50	25.24	274.9	0.092	
72	10.31	33.60	3.72	1.60	50	11.50	33.45	4.95	1.00	25.50	250.7	0.145	
95	9.74	33.75	3.08	1.90	75	10.20	33.63	3.65	1.63	25.87	215.7	0.203	
146	9.12	34.07	2.21	2.26	100	9.64	33.79	2.95	1.95	26.09	195.3	0.255	
192	8.78	34.16	1.68	2.42	150	9.09	34.08	2.15	2.29	26.41	166.0	0.345	
283	8.12a)	34.21	1.23	2.68	200	8.74	34.17	1.62	2.44	26.53	155.2	0.426	
408	6.69	34.20	0.88	2.80	250	8.39	34.20	1.30	2.58	26.61	148.4	0.501	
470	6.35	34.22	0.60	2.96	300	7.90	34.21	1.17	2.72	26.69	141.4	0.573	
567	5.76	34.33	0.40	3.10	400	6.74	34.20	0.89	2.79	26.85	127.5	0.708	
759	4.75	34.40	0.42	3.22	500	6.16	34.26	0.55	3.02	26.97	116.5	0.830	
951	4.10	34.44	0.58	3.17	600	5.53	34.35	0.40	3.11	27.12	103.2	0.939	
1151	3.60	34.47	0.75	3.12	700	4.99	34.38	0.40	3.19	27.21	95.0	1.039	
					800	4.58	34.42	0.42	3.22	27.29	88.0	1.130	
					1000	3.96	34.44	0.65	3.15	27.37	81.0	1.300	

a) Alternate value, 7.89°C, not used in interpolation.

SIO

CCOFI
5004

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

100.60 CREST; April 16, 1950; 1346 GCT; 30°40'N, 118°50'W; sounding, 1,800 fm; wind, 270°, force 2; weather, clear; sea, very rough; wire angle, 8°.

0	15.00	33.48	5.58	0.43	0	15.00	33.48	5.58	0.43	24.82	314.0	0.000
10	14.97	33.44	5.51	0.44	10	14.97	33.44	5.51	0.44	24.80	316.4	0.032
30	14.93	33.48	5.53	0.46	20	14.95	33.46	5.52	0.45	24.82	314.9	0.063
49	14.24	33.44	5.73	0.52	30	14.93	33.48	5.53	0.46	24.83	313.8	0.095
73	12.04	33.44	5.76	0.78	50	14.18	33.44	5.74	0.54	24.96	301.6	0.156
97	10.67	33.48	4.72	1.28	75	11.73	33.44	5.76	0.79	25.45	256.0	0.226
151	8.74	33.86	2.96	1.92	100	10.57	33.50	4.25	1.35	25.70	231.9	0.287
199	8.17	34.05	2.03	2.37	150	8.77	33.84	2.95	1.92	26.27	179.1	0.390
294	7.27	34.18	1.18	2.73	200	8.14	34.05	2.00	2.39	26.53	155.1	0.473
394	6.69	34.22	0.82	2.84	250	7.67	34.13	1.37	2.64	26.66	143.2	0.548
490	5.78	34.27	0.56	2.96	300	7.23	34.19	1.15	2.74	26.77	133.2	0.617
590	5.34	34.33	0.44	2.98	400	6.64	34.22	1.05	2.85	26.88	124.6	0.745
788	4.52	34.43	0.43	3.14	500	5.69	34.28	0.52	2.97	27.04	109.0	0.862
984	3.98	34.47	0.65	3.06	600	5.30	34.34	0.45	2.99	27.14	100.7	0.967
1195	3.46	34.52	0.85	3.05	700	4.87	34.40	0.43	3.06	27.24	92.1	1.063
					800	4.48	34.43	0.45	3.14	27.31	85.9	1.152
					1000	3.94	34.47	0.68	3.05	27.39	78.6	1.318

100.70 CREST; April 16, 1950; 0733 GCT; 30°19.5'N, 119°29.5'W; sounding, 2,190 fm; wind, 320°, force 3; weather, clear; sea, very rough; wire angle, 19°.

0	15.38	33.40	5.92	0.44	0	15.38	33.40	5.92	0.44	24.68	327.8	0.000
9	15.36	33.44	5.50	0.42	10	15.36	33.44	5.50	0.42	24.71	324.8	0.033
23	15.37	33.44	5.57	0.50	20	15.36	33.44	5.58	0.50	24.71	324.9	0.065
46	15.36	33.44	5.65	0.46	30	15.36	33.44	5.58	0.50	24.71	325.3	0.098
69	15.27	33.57	5.69	0.44	50	15.34	33.44	5.66	0.46	24.72	325.3	0.163
92	13.83	33.55	5.62	0.49	75	15.23	33.57	5.67	0.45	24.84	314.4	0.243
141	11.33	33.48	5.04	1.08	100	13.38	33.53	5.60	0.53	25.20	280.7	0.317
185	9.17	33.77	3.77	1.74	150	10.87	33.50	4.82	1.28	25.65	238.1	0.447
270	7.64	33.96	3.02	2.25	200	8.78	33.83	3.64	1.85	26.26	180.7	0.552
360	6.68	34.18	1.26	2.77	250	7.90	33.93	3.24	2.16	26.47	161.2	0.637
446	6.45	34.22	0.78	3.06	300	7.18	34.03	2.68	2.40	26.65	144.3	0.714
538	5.80	34.23	0.64	3.12	400	6.56	34.21	0.94	2.95	26.88	124.1	0.847
720	4.86	34.40	0.41	3.26	500	6.07	34.23	0.67	3.07	26.96	117.4	0.968
904	4.28	34.45	0.53	3.25	600	5.45	34.27	0.54	3.19	27.06	108.0	1.081
1100	3.66	34.49	0.83	3.12	700	4.94	34.38	0.40	3.26	27.21	94.4	1.182
					800	4.59	34.44	0.45	3.26	27.30	86.5	1.272
					1000	3.98	34.46	0.64	3.21	27.38	79.8	1.439

100.80 CREST; April 16, 1950; 0120 GCT; 29°57'N, 120°10'W; sounding, 1,900 fm; wind, 340°, force 5; weather, partly cloudy; sea, high; wire angle, 18°.

0	15.63	33.46	5.47	0.50	0	15.63	33.46	5.47	0.50	24.67	328.7	0.000
10	15.61	33.49	5.44	0.48	10	15.61	33.49	5.44	0.48	24.69	326.4	0.033
29	15.60	33.46	5.43	0.48	20	15.61	33.48	5.44	0.48	24.69	327.5	0.065
57	15.52	33.49	5.55	0.46	30	15.60	33.46	5.43	0.48	24.67	328.8	0.098
85	13.78	33.32	5.81	0.51	50	15.53	33.49	5.50	0.46	24.71	325.6	0.164
113	12.58	33.32	5.63	0.66	75	14.58	33.35	5.75	0.49	24.81	317.0	0.244
168	9.67	33.67	4.12	1.50	100	13.00	33.32	5.75	0.59	25.11	288.6	0.320
223	8.46	33.93	3.86	1.80	150	10.26	33.47	4.28	1.04	25.74	280.8	0.450
332	7.29	34.09	1.58	2.64	200	8.83	33.84	4.00	1.71	26.26	180.8	0.552
437	6.69	34.22	0.87	2.94	250	8.03	33.98	3.52	1.94	26.49	159.5	0.637
546	6.01	34.27	0.52	3.08	300	7.50	34.05	2.33	2.36	26.62	147.4	0.708
651	5.52	34.31	0.56	3.10	400	6.92	34.17	1.02	2.90	26.80	132.1	0.853
869	4.52	34.43	0.43	3.20	500	6.28	34.26	0.63	3.00	26.96	118.1	0.978
1082	3.79	34.51	0.75	3.18	600	5.75	34.28	0.52	3.10	27.04	111.1	1.093
1289	3.24	34.58	0.95	3.11	700	5.29	34.34	0.56	3.11	27.14	101.6	1.199
					800	4.83	34.39	0.50	3.17	27.24	93.2	1.297
					1000	4.04	34.49	0.57	3.20	27.40	78.3	1.468

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

CREST; April 15, 1950; 1907 GCT; 29°36'N, 120°49'W; sounding, 2,200 fm; wind, 340°, force 5, weather, partly cloudy; sea, high; wire angle, 27°. 100.90

0	16.19	33.65	5.35	0.46	0	16.19	33.65	5.35	0.46	24.68	327.0	0.000
9	16.15	33.68	5.56	0.44	10	16.15	33.68	5.56	0.45	24.72	324.1	0.033
22	16.11	33.66	5.57	0.44	20	16.11	33.66	5.57	0.44	24.71	325.2	0.065
48	16.12	33.64	5.59	0.44	30	16.12	33.65	5.58	0.44	24.70	326.0	0.098
70	15.68	33.66	5.65	0.45	50	16.12	33.64	5.60	0.44	24.69	327.5	0.163
96	14.75	33.61	5.77	0.43	75	15.48	33.65	5.67	0.45	24.85	313.6	0.243
142	12.06	33.60	5.17	0.86	100	14.40	33.61	5.78	0.44	25.05	294.9	0.319
187	9.35	33.73	3.59	1.78	150	11.45	33.61	4.90	1.42	25.63	240.1	0.453
274	7.90	34.04	2.67	2.31	200	9.05	33.77	3.35	1.85	26.17	189.4	0.561
366	6.68	34.13	1.36	2.80	250	8.14	33.98	2.86	2.17	26.47	161.1	0.648
455	6.11	34.22	0.76	2.97	300	7.57	34.07	2.44	2.48	26.63	146.9	0.724
547	5.60	34.23	0.77	2.86	400	6.36	34.16	1.01	2.89	26.87	125.2	0.861
734	4.78	34.40	0.38	2.23	500	5.88	34.23	0.78	2.91	26.98	115.0	0.981
930	4.10	34.49	0.59	3.27	600	5.28	34.26	0.74	2.97	27.08	106.4	1.091
1126	3.61	34.50	0.77	3.12	700	4.88	34.36	0.47	3.18	27.21	95.0	1.192
					800	4.52	34.45	0.39	3.26	27.32	85.0	1.282
					1000	3.92	34.50	0.68	3.24	27.42	76.2	1.444

CREST; April 15, 1950; 1254, 1337 GCT; 29°17'N, 121°29'W; sounding, 2,050 fm; wind, 360°, force 5; weather, partly cloudy; sea, very rough; wire angle, 33°, 39°. 100.100

0	16.06	33.62	5.45	0.44	0	16.06	33.62	5.45	0.44	24.70	326.0	0.000
9	16.04	33.62	5.40	0.44	10	16.04	33.62	5.40	0.44	24.70	326.2	0.033
25	16.05	33.62	5.41	0.44	20	16.05	33.62	5.41	0.44	24.70	326.5	0.065
51	16.07	33.62	5.48	0.39	30	16.05	33.62	5.43	0.44	24.70	326.9	0.098
76	16.85	34.00	5.43	0.38	50	16.06	33.62	5.48	0.39	24.69	327.6	0.163
100	15.50	33.95	5.38	0.41	75	16.82	34.00	5.44	0.38	24.81	317.3	0.244
149	12.78	33.77	4.91	0.74	100	15.50	33.95	5.38	0.41	25.08	292.6	0.320
198	9.86	33.73	4.29	1.41	150	12.74	33.77	4.90	0.78	25.51	251.9	0.457
292	7.84	34.05	2.83	2.16	200	9.78	33.73	4.26	1.43	26.02	204.2	0.571
383	7.15	34.18	1.37	2.62	250	8.55	33.94	3.51	1.90	26.38	170.1	0.664
477	6.54	34.27	0.70	3.03	300	7.72	34.06	2.69	2.21	26.60	149.8	0.744
567	5.97	34.27r	0.76r	2.89r	400	7.04	34.20	1.22	2.70	26.80	131.5	0.884
753	4.86	34.40	0.40	3.26	500	6.40	34.28	0.65	3.07	26.96	118.2	1.009
					600	5.74	34.33	0.47	3.20	27.08	107.4	1.122
1023	3.95	34.51	0.52	3.22	700	5.15	34.38	0.41	3.25	27.19	97.0	1.224
					800	4.63	34.42	0.41	3.26	27.28	88.8	1.317
					1000	3.97	34.50	0.51	3.22	27.41	76.6	1.482

CREST; April 15, 1950; 0641 GCT; 28°57.5'N, 122°08.5'W; sounding, 2,260 fm; wind, 360°, force 6; weather, partly cloudy; sea, very high; wire angle, 28°. 100.110

0	16.22	33.64	5.57	0.40	0	16.22	33.64	5.57	0.40	24.67	328.2	0.000
9	16.23	33.64	5.49	0.42	10	16.22	33.64	5.47	0.42	24.67	328.5	0.033
26	16.22	33.57	5.43	0.42	20	16.22	33.58	5.44	0.42	24.63	333.2	0.066
52	15.88	33.64	5.43	0.38	30	16.21	33.57	5.43	0.41	24.62	334.1	0.099
78	15.70	33.64	5.57	0.38	50	15.99	33.64	5.43	0.38	24.72	324.7	0.165
103	15.47	33.66	5.50	0.40	75	15.70	33.64	5.57	0.38	24.79	319.0	0.246
155	12.81	33.68	5.09	0.68	100	15.54	33.66	5.52	0.40	24.84	314.9	0.325
206	9.84	33.68	4.09	1.54	150	13.23	33.68	5.13	0.61	25.35	267.8	0.470
309	7.96	34.02	2.74	2.13	200	10.04	33.68	4.22	1.50	25.94	211.9	0.591
408	6.78	34.13	1.45	2.62	250	8.87	33.82	3.26	1.92	26.24	183.8	0.690
511	6.09u	34.20	0.74	2.97	300	8.08	34.00	2.80	2.11	26.50	159.5	0.775
523p	5.90	34.20	0.69	2.88u	400	6.85	34.12	1.56	2.57	26.77	134.9	0.923
690p	4.94	34.36	0.37	3.08	500	6.06	34.19	0.76	2.96	26.93	120.3	1.050
855p	4.44	34.40	0.50	3.17	600	5.44	34.26	0.47	3.04	27.06	108.7	1.165
1031p	3.93	34.49	0.71	3.10	700	4.93	34.36	0.37	3.08	27.20	95.8	1.267
					800	4.60	34.38	0.43	3.15	27.25	91.3	1.360
					1000	4.00	34.48	0.69	3.12	27.40	78.6	1.530

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5004

OBSERVED					INTERPOLATED					COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m
100.120	CREST; April 15, 1950; 0028 GCT; 28°39.5'N, 122°48.5'W; sounding, 2,350 fm; wind, 360°, force 7; weather, cloudy; sea, very high; wire angle, 41°.											
0	17.06	33.89	5.78	0.29	0	17.06	33.89	5.78	0.29	24.67	328.5	0.000
8	17.04	33.87	5.44	0.30	10	17.05	33.87	5.43	0.30	24.66	330.0	0.033
24	17.05	33.91	5.21	0.36	20	17.05	33.90	5.23	0.34	24.68	328.1	0.066
47	17.03	33.89	5.49	0.41	30	17.04	33.91	5.25	0.37	24.69	327.3	0.099
70	16.60	33.85	5.46	0.44	50	17.02	33.88	5.48	0.42	24.67	329.7	0.164
94	16.10	33.80	5.48	0.60	75	16.52	33.84	5.45	0.45	24.76	322.1	0.246
140	14.36	33.93	5.09	0.80	100	15.80	33.80	5.45	0.62	24.89	310.3	0.325
186	10.97	33.62	4.45	1.11	150	13.44	33.93	5.00	0.85	25.49	253.7	0.465
279	8.29	34.02	3.62	1.74	200	10.33	33.64	4.27	1.23	25.85	219.7	0.585
367	7.03	34.05	2.31	2.24	250	8.84	33.88	3.81	1.57	26.29	178.9	0.684
459	6.21	34.14	1.01	2.68	300	7.94	34.03	3.45	1.88	26.54	155.2	0.767
550	5.56	34.14	1.16	2.90	400	6.78	34.08	1.70	2.42	26.75	136.8	0.913
746	4.76	34.40	0.40	3.07a)	500	5.87	34.14	1.05	2.80	26.91	121.6	1.043
947	4.16	34.45	0.61	2.91	600	5.32	34.20	1.05	2.96	27.03	111.5	1.159
1155	3.56	34.51	0.89	3.13	700	4.92	34.35	0.51	3.04	27.19	96.4	1.263
					800	4.60	34.42	0.39	3.05	27.28	88.2	1.355
					1000	4.00	34.46	0.65	2.92	27.38	80.0	1.524
105.35	CREST; April 4, 1950; 0741 GCT; 30°39'N, 116°32.5'W; sounding, 680 fm; wind, 270°, force 1; weather, overcast; sea, very rough; wire angle, 13°.											
0	14.53	33.51	5.65	0.38	0	14.53	33.51	5.65	0.38	24.94	302.6	0.000
9	14.18	33.49	5.80	0.38	10	14.05	33.49	5.80	0.38	25.03	294.3	0.030
24	12.61	33.49	5.11	0.68	20	13.13	33.49	5.25	0.42	25.22	276.6	0.058
48	10.64	33.58	3.08	1.39	30	12.10	33.50	4.00	1.20	25.43	257.1	0.085
73	9.73	33.73	2.67	1.64	50	10.53	33.60	3.02	1.42	25.79	223.0	0.133
97	9.24	33.87	2.60	1.80	75	9.67	33.75	2.67	1.66	26.05	198.4	0.186
151	8.44	34.07	1.95	2.12	100	9.16	33.90	2.60	1.82	26.25	179.6	0.233
199	-	34.13	1.82	2.40	150	8.43	34.07	1.95	2.12	26.50	157.0	0.217
296	7.50	34.22	0.95	3.04	200	8.03	34.13	1.82	2.40	26.61	147.5	0.394
398	6.50	34.22	0.68	3.05	250	7.79	34.18	1.47	2.73	26.68	141.2	0.465
495	6.24	34.34	0.35	3.31	300	7.48	34.22	0.93	3.04	26.76	134.5	0.535
597	5.79	34.31	0.33	3.30	400	6.50	34.22	0.67	3.06	26.89	122.6	0.663
797	4.84	34.42	0.37	3.40	500	6.22	34.34	0.35	3.32	27.02	111.7	0.781
995	4.10	34.43	0.53	3.35	600	5.77	34.31	0.33	3.30	27.06	109.2	0.891
1200	3.45	34.51	0.81	3.32b)	700	5.27	34.37	0.35	3.36	27.17	99.3	0.995
					800	4.81	34.42	0.38	3.40	27.26	91.0	1.090
					1000	4.08	34.43	0.54	3.34	27.35	83.1	1.265
110.35	CREST; April 11, 1950; 2310 GCT; 29°46.5'N, 116°01'W; sounding, 730 fm; wind, 320°, force 5; weather, cloudy; sea, very rough; wire angle, 27°.											
0	12.85	33.58	6.19	0.54	0	12.85	33.58	6.19	0.54	25.34	264.3	0.000
9	12.63	33.57	5.75	0.62	10	12.45	33.57	5.73	0.63	25.41	258.0	0.026
22	11.95	33.64	5.24	1.16	20	11.97	33.63	5.25	0.90	25.55	244.8	0.051
44	-	33.69	5.09	1.30	30	11.70	33.67	5.18	1.24	25.63	237.5	0.075
66	10.62	33.69	3.28	1.82	50	11.12	33.69	4.95	1.35	25.75	226.5	0.122
88	9.30	33.86	3.36	1.92	75	10.10	33.71	3.30	1.87	25.95	208.2	0.176
135	8.60	33.98	2.66	2.26	100	9.07	33.89	3.06	1.97	26.26	178.8	0.226
179	8.22	34.09	2.45	2.31	150	8.44	34.02	2.57	2.29	26.46	160.8	0.309
267	8.18	34.30	2.17	2.76	200	8.20	34.14	2.35	2.36	26.59	149.4	0.387
360	7.20	34.25	1.00	2.88	250	8.18	34.27	2.20	2.62	26.70	140.1	0.459
450	6.50	34.25	0.78	3.00	300	7.94	34.28	1.93	2.84	26.74	136.8	0.529
546	6.02	34.33	0.59	3.09	400	6.83	34.25	0.85	2.92	26.87	125.0	0.606
737	5.17	34.36	0.40	3.19	500	6.25	34.30	0.66	3.06	26.99	114.8	0.780
932	4.31	34.47	0.59	3.21	600	5.78	34.34	0.52	3.12	27.08	107.0	0.891
1135	3.68	34.51	0.74	3.15	700	5.34	34.35	0.42	3.17	27.14	101.8	0.995
					800	4.89	34.40	0.40	3.21	27.24	93.4	1.093
					1000	4.09	34.49	0.71	3.20	27.39	78.7	1.265

a) Alternate value, 3.00 μg at/L, not used in interpolation.
b) Alternate value, 3.17 μg at/L, not used in interpolation.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
CREST; April 12, 1950; 0307 GCT; 29°36.5'N, 116°20'W; sounding, 2,100 fm; wind, 320°, force 4; weather, cloudy; sea, very rough; wire angle, 38°.													110.40
0	15.28	33.55	5.73	0.46	0	15.28	33.55	5.73	0.46	24.81	314.7	0.000	
8	15.23	33.53	5.75	0.44	10	15.23	33.53	5.75	0.42	24.81	315.5	0.032	
20	15.20	33.55	5.57	0.40	20	15.20	33.55	5.57	0.40	24.83	313.5	0.063	
43	14.55	33.46	5.67	0.52	30	15.19	33.53	5.59	0.42	24.82	315.0	0.094	
62	11.97	33.35	5.64	0.76	50	13.40	33.41	5.67	0.59	25.10	288.6	0.155	
84	10.94	33.43	4.68	1.14	75	11.30	33.39	5.25	0.98	25.49	251.9	0.222	
123	9.69	33.71	3.36	1.80	100	10.36	33.55	4.00	1.48	25.78	224.9	0.282	
161	-	33.96	2.70	2.06	150	9.09	33.90	2.85	2.00	26.27	179.4	0.383	
234	8.00	34.11	2.02	2.44	200	8.38	34.07	2.30	2.27	26.51	157.0	0.467	
310	7.23	34.18	1.35	2.66	250	7.83	34.13	1.86	2.50	26.64	145.4	0.543	
382	6.71a)	34.23	0.89	2.93	300	7.32	34.17	1.41	2.64	26.74	136.0	0.613	
456	6.32	34.23	0.65	2.90	400	6.62	34.23	0.81	2.93	26.89	123.5	0.743	
614	5.40	34.36	0.41	3.12	500	6.07	34.25	0.55	2.97	26.97	116.1	0.862	
790	4.68	34.43	0.43	3.18	600	5.49	34.35	0.42	3.11	27.12	102.5	0.972	
976	4.14	34.45	0.59	3.16	700	5.00	34.41	0.41	3.17	27.23	92.9	1.069	
					800	4.65	34.43	0.44	3.18	27.29	88.2	1.160	
					1000	(4.06)	(34.45)	(0.60)	(3.15)	(27.37)	(81.4)	(1.329)	
CREST; April 12, 1950; 0902 GCT; 29°13.5'N, 116°59'W; sounding, 1,900 fm; wind, 320°, force 5; weather, partly cloudy; sea, very rough; wire angle, 36°.													110.50
0	16.14	33.68	5.64	0.32	0	16.14	33.68	5.64	0.32	24.72	323.5	0.000	
8	16.11	33.69	5.51	0.41	10	16.11	33.69	5.50	0.42	24.74	322.5	0.032	
21	16.12	33.69	5.44	0.42	20	16.12	33.69	5.45	0.42	24.74	322.8	0.065	
45	-	33.61	5.65	0.44	30	16.12	33.67	5.48	0.42	24.72	324.7	0.097	
65	14.95	33.56	5.44	0.44	50	15.66	33.59	5.62	0.44	24.76	321.2	0.162	
89	14.11	33.57	5.69	0.54	75	14.59	33.56	5.48	0.46	24.97	301.8	0.239	
132	11.14	33.60	4.07	1.47	100	13.36	33.58	5.58	0.66	25.24	276.6	0.312	
173	9.92	33.86	3.20	1.90	150	10.27	33.65	3.58	1.73	25.87	216.9	0.436	
254	9.89	34.39	0.90	2.64	200	9.91	34.15	2.05	2.13	26.32	175.1	0.533	
336	8.61	34.37	0.75	2.78	250	9.89	34.39	0.93	2.61	26.52	158.0	0.616	
413	7.72	34.40	0.50	2.94	300	9.18	34.38	0.85	2.76	26.63	148.2	0.693	
489	6.88	34.33	0.56	2.96	400	7.86	34.39	0.54	2.91	26.84	129.1	0.831	
652	5.60	34.40	0.32	3.20	500	6.79	34.33	0.56	2.96	26.94	119.8	0.956	
829	4.72	34.43	0.38	3.28	600	5.95	34.34	0.39	3.11	27.06	109.1	1.070	
1012	4.00	34.49	0.60	3.18	700	5.33	34.37	0.30	3.26	27.16	100.1	1.175	
					800	4.85	34.42	0.36	3.28	27.26	91.5	1.270	
					1000	4.05	34.49	0.58	3.20	27.40	78.4	1.441	
CREST; April 12, 1950; 1457 GCT; 28°50'N, 117°40'W; sounding, 2,000 fm; wind, 320°, force 4; weather, partly cloudy; sea, rough; wire angle, 20°.													110.60
0	16.09	33.71	5.42	0.41	0	16.09	33.71	5.42	0.41	24.75	320.5	0.000	
9	16.08	33.71	5.46	0.43	10	16.08	33.71	5.46	0.43	24.76	320.2	0.032	
23	16.08	33.71	5.34	0.45	20	16.08	33.71	5.35	0.45	24.76	320.5	0.064	
51	15.68	33.69	5.48	0.46	30	16.07	33.71	5.35	0.46	24.76	320.8	0.096	
75	15.33	33.67	5.57	0.48	50	15.92	33.69	5.48	0.46	24.78	319.4	0.160	
104	14.00	33.57	5.56	0.54	75	15.33	33.67	5.57	0.48	24.90	308.6	0.239	
155	10.62	33.64	3.86	1.52	100	14.45	33.58	5.58	0.53	25.01	298.2	0.315	
207	9.97	34.06	2.25	2.17	150	10.77	33.63	4.65	1.39	25.77	226.9	0.446	
310	9.02	34.33	0.98	2.78	200	10.02	33.98	2.40	2.12	26.17	189.4	0.550	
419	7.74	34.33	0.61	2.87	250	9.57	34.27	1.55	2.46	26.47	161.7	0.638	
522	6.48	34.33	0.43	3.06	300	9.11	34.33	1.04	2.74	26.60	150.8	0.716	
626	5.92	34.36	0.50	3.01	400	7.96	34.33	0.65	2.87	26.78	135.0	0.858	
832	4.62	-	0.47	3.20	500	6.61	34.33	0.45	3.04	26.97	117.4	0.985	
1043	3.96	34.50	0.62	3.08	600	6.06	34.35	0.45	3.02	27.05	109.8	1.098	
1248	3.43	34.56	0.84	3.10	700	5.40	(34.39)	0.50	3.05	(27.17)	(99.6)	(1.203)	
					800	4.78	(34.43)	0.50	3.17	(27.27)	(89.8)	(1.303)	
					1000	4.06	(34.49)	0.58	3.13	(27.40)	(78.5)	(1.471)	

a) Mean value of 6.66 and 6.76°C.

SIO

CCOFI 5004

OBSERVED					INTERPOLATED					COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m

110.70 CREST; April 13, 1950; 0742 GCT; 28°36'N, 118°18.5'W; sounding, 1,950 fm; wind, 300°, force 5; weather, partly cloudy; sea, very rough; wire angle, 20°.

0	16.12	33.53	5.98	0.36	0	16.12	33.53	5.98	0.36	24.61	334.3	0.000
10	16.14	33.53	5.47	0.32	10	16.14	33.53	5.47	0.32	24.60	335.1	0.034
24	16.12	33.53	4.96	0.38	20	16.13	33.53	4.98	0.36	24.61	335.1	0.067
52	15.06	33.49	5.65	0.38	30	16.11	33.53	4.96	0.38	24.61	334.9	0.101
74	13.23	33.36	5.24	0.50	50	15.30	33.50	5.65	0.38	24.77	320.2	0.166
103	11.95	33.37	5.13	0.72	75	13.17	33.36	5.24	0.50	25.11	288.4	0.242
154	9.81	33.61	4.22	1.40	100	12.03	33.37	5.13	0.62	25.34	267.0	0.312
205	8.73	33.87	2.88	1.90	150	9.88	33.59	4.33	1.36	25.89	215.0	0.432
307	8.68	34.34	0.80	2.53	200	8.74	33.85	2.97	1.85	26.29	178.7	0.531
414	7.47	34.33	0.45	2.66	250	8.70	34.13	1.75	2.22	26.51	158.4	0.614
516	6.53	34.35	0.28	2.80	300	8.68	34.34	0.88	2.50	26.67	143.5	0.690
618	5.79	34.36	0.36	2.96	400	7.62	34.33	0.47	2.66	26.82	130.1	0.826
721	5.30	34.38	0.41	3.04	500	6.64	34.34	0.30	2.77	26.97	116.9	0.950
820	4.76	34.41	0.43	3.10	600	5.86	34.36	0.35	2.93	27.09	106.5	1.062
1025	4.03	34.44	0.67	3.12	700	5.39	34.37	0.40	3.03	27.15	100.8	1.165
1227	3.50	34.50	0.91	-	800	4.84	34.40	0.43	3.09	27.24	92.9	1.262
					1000	4.09	34.44	0.63	3.12	27.36	82.5	1.438

110.80 CREST; April 13, 1950; 1333 GCT; 28°16'N, 118°57'W; sounding, 2,100 fm; wind, 320°, force 5; weather, cloudy; sea, rough; wire angle, 32°.

0	15.54	33.36	5.53	0.41	0	15.54	33.36	5.53	0.41	24.61	333.8	0.000
9	15.52	33.37	5.64	0.44	10	15.52	33.37	5.65	0.44	24.63	332.9	0.033
25	15.52	33.36	5.65	0.44	20	15.52	33.36	5.65	0.44	24.61	334.4	0.067
46	14.36	33.32	5.67	0.42	30	15.52	33.35	5.66	0.44	24.61	335.0	0.100
66	13.34	-	5.82	0.52	50	14.10	33.32	5.70	0.44	24.89	308.9	0.165
89	12.38	33.33	5.61	0.68	75	12.90	33.32	5.80	0.57	25.13	286.2	0.239
132	10.64	33.45	4.53	-	100	11.90	33.35	5.37	0.83	25.35	266.0	0.308
175	9.16	33.78	3.72	1.77	150	9.98	33.59	4.15	1.48	25.88	216.7	0.429
259	8.23	34.05	2.41	2.26	200	8.78	33.90	3.28	1.97	26.31	175.5	0.527
347	7.17	34.20	1.13	2.76	250	8.31	34.04	2.52	2.23	26.49	159.3	0.610
431	6.76	34.29	0.52	2.95	300	7.66	34.12	1.80	2.47	26.65	144.6	0.687
516	6.10	34.31	0.49	2.99	400	6.87	34.27	0.68	2.92	26.88	123.9	0.821
694	4.96	34.36	0.39	3.13	500	6.23	34.31	0.49	2.99	27.00	113.8	0.940
883	4.25	34.45	0.56	3.16	600	5.42	34.33	0.45	3.05	27.12	103.2	1.048
1076	3.72	34.46	0.77	3.17	700	4.93	34.36	0.40	3.14	27.20	95.8	1.148
					800	4.53	34.41	0.46	3.16	27.28	88.1	1.240
					1000	3.91	34.46	0.72	3.16	27.39	79.0	1.407

110.90 CREST; April 13, 1950; 1924 GCT; 28°00'N, 119°35'W; sounding, 2,200 fm; wind, 320°, force 5; weather, overcast; sea, very rough; wire angle, 30°.

0	15.69	33.44	5.59	0.47	0	15.69	33.44	5.59	0.47	24.64	331.4	0.000
9	15.68	33.46	5.65	0.46	10	15.68	33.46	5.65	0.46	24.66	329.8	0.033
26	15.65	33.53	5.71	0.48	20	15.66	33.52	5.70	0.47	24.71	325.6	0.066
48	15.40	33.46	5.83	0.42	30	15.63	33.53	4.75	0.48	24.72	324.3	0.098
69	14.97	33.46	5.95	0.44	50	15.35	33.46	5.90	0.42	24.73	324.2	0.163
94	14.09	33.44	5.48	0.48	75	14.79	33.46	5.85	0.45	24.85	313.1	0.243
140	11.42	33.44	5.25	1.01	100	13.88	33.44	5.42	0.51	25.03	296.8	0.319
184	9.35	33.64	4.21	1.66	150	10.82	33.45	5.22	1.20	25.62	240.9	0.454
271	7.96	34.07	2.79	2.18	200	8.93	33.78	3.77	1.80	26.20	186.9	0.561
360	7.34	34.16	1.85	2.61	250	8.16	34.02	3.05	2.08	26.50	158.4	0.647
448	6.47	34.27	0.86	3.04	300	7.76	34.11	2.50	2.30	26.63	146.7	0.724
539	5.98	34.29	0.83	2.93	400	6.90	34.21	1.33	2.89	26.83	128.9	0.860
722	5.12	34.40	0.44	3.16	500	6.18	34.28	0.80	2.98	26.98	115.3	0.983
912	4.36	34.47	0.49	3.25	600	5.67	34.32	0.71	2.94	27.08	107.1	1.094
1111	3.70	34.54	1.24	3.08	700	5.19	34.39	0.46	3.10	27.19	96.8	1.196
					800	4.77	34.43	0.44	3.24	27.27	89.7	1.289
					1000	4.06	34.50	0.80	3.19	27.40	77.7	1.456

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

CREST; April 14, 1950; 0115 GCT; 27°38.5'N, 120°17.5'W; sounding, 2,210 fm; wind, 320°, force 6; weather, cloudy; sea, high; wire angle, 35°. 110.100

0	16.79	33.80	5.42	0.42	0	16.79	33.80	5.42	0.42	24.67	328.8	0.000	
8	16.78	33.77	5.33	0.40	10	16.77	33.77	5.32	0.40	24.65	331.0	0.033	
21	16.76	33.84	5.49	0.43	20	16.76	33.84	5.48	0.43	24.70	325.8	0.066	
45	16.70	33.86	5.92	0.44	30	16.74	33.85	5.60	0.44	24.71	325.1	0.098	
65	16.35	33.82	5.64	0.40	50	16.65	33.86	5.88	0.43	24.74	322.8	0.163	
88	15.72	33.77	5.42	0.44	75	16.08	33.80	5.56	0.41	24.83	315.6	0.243	
130	13.09	33.64	5.07	0.80	100	15.00	33.73	5.35	0.50	25.01	298.6	0.320	
171	10.85	33.87	2.62	2.10	150	11.74	33.72	4.52	1.36	25.66	237.1	0.454	
249	10.22	34.27	1.44	2.64	200	10.55	34.06	1.90	2.38	26.14	192.5	0.561	
327	9.63	34.38	0.92	2.76	250	10.19	34.27	1.43	2.64	26.37	171.9	0.652	
399	8.91	34.38	0.83	2.87	300	9.83	34.36	1.08	2.74	26.50	160.5	0.735	
469	7.64	34.31r	0.92r	2.78r	400	8.88	34.38	0.82	2.87	26.67	145.5	0.888	
613	6.11	34.38	0.38	3.18	500	7.26	34.38	0.67	3.07	26.92	122.6	1.022	
782	5.10	34.40	0.39	3.22	600	6.22	34.38	0.40	3.18	27.06	110.0	1.139	
968	4.25	34.49	0.52	3.20	700	5.54	34.39	0.35	3.22	27.15	101.4	1.244	
					800	5.00	34.40	0.40	3.23	27.22	94.8	1.342	
					1000	(4.09)	(34.50)	(0.58)	(3.18)	(27.40)	(78.1)	(1.515)	

CREST; April 14, 1950; 0706 GCT; 27°22'N, 120°53'W; sounding, 2,200 fm; wind, 340°, force 5; weather, cloudy; sea, very high; wire angle, 28°. 110.110

0	16.76	34.18r	5.51	0.42	0	16.76	(33.71)	5.51	0.42	(24.60)	(334.8)	(0.000)	
9	16.76	33.71	5.43	0.44	10	16.76	33.71	5.43	0.44	24.60	335.1	0.034	
26	16.76	33.73	5.47	0.42	20	16.76	33.72	5.43	0.43	24.61	334.7	0.067	
53	16.62	33.81	5.44	0.43	30	16.74	33.74	5.48	0.42	24.63	333.1	0.100	
79	16.45	33.84	5.50	0.38	50	16.64	33.80	5.45	0.42	24.70	327.2	0.166	
105	15.49	33.72	5.56	0.46	75	16.49	33.84	5.47	0.39	24.76	321.5	0.248	
157	12.43	33.64	4.57	-	100	15.78	33.73	5.57	0.43	24,84	314.7	0.327	
209	9.80	33.82	3.35	1.94	150	12.85	33.64	4.90	0.84	25.39	263.6	0.471	
312	8.62	34.20	1.58	2.63	200	9.99	33.78	3.49	1.75	26.02	203.7	0.589	
412	7.86	34.25	0.77	2.97	250	9.18	33.99	2.57	2.32	26.32	176.0	0.684	
517	6.85	34.31	0.47	3.06	300	8.69	34.18	1.76	2.58	26.55	155.3	0.766	
619	6.19	34.33	0.39	3.10	400	7.94	34.24	0.84	2.93	26.71	139.4	0.914	
833	4.85	34.41	0.42	3.38	500	7.00	34.30	0.51	3.06	26.89	125.0	1.046	
1046	3.94	34.49	0.63	3.27	600	6.32	34.33	0.40	3.10	27.00	115.0	1.151	
1251	3.44	34.50	0.89	3.24	700	5.64	34.36	0.40	3.21	27.11	105.1	1.226	
					800	5.00	34.39	0.47	3.35	27.22	95.5	1.326	
					1000	4.10	34.47	0.57	3.30	27.38	80.5	1.502	

CREST; April 11, 1950; 1758 GCT; 29°12.5'N, 115°39'W; sounding, 850 fm; wind, 320°, force 5; weather, cloudy; sea, rough; wire angle, 20°. 113.35

0	13.16	33.63	6.07	0.48	0	13.16	33.63	6.07	0.48	25.32	266.6	0.000	
10	13.07	33.60	5.82	0.54	10	13.07	33.60	5.82	0.54	25.31	267.5	0.027	
24	13.01	33.62	5.95	0.58	20	13.03	33.61	5.91	0.57	25.33	266.0	0.053	
47	-	33.51	4.65	1.00	30	12.99	33.61	5.85	0.62	25.34	265.5	0.080	
71	10.44	33.61	3.84	1.42	50	12.67	33.51	4.57	1.10	25.32	267.4	0.133	
94	9.61	33.82	3.10	1.78	75	10.00	33.64	3.70	1.46	25.91	211.8	0.193	
143	9.40	34.11	2.00	2.12	100	9.59	33.86	2.84	1.84	26.15	189.4	0.243	
186	8.80	34.14	1.74	2.33	150	9.31	34.12	1.93	2.15	26.40	166.9	0.332	
269	8.10	34.23	1.20	2.58	200	8.68	34.15	1.63	2.39	26.52	155.6	0.413	
354	7.66	34.31	0.75	2.84	250	8.22	34.20	1.30	2.53	26.63	146.1	0.488	
435	7.02	34.34	0.51	3.00	300	7.94	34.26	1.00	2.65	26.72	138.3	0.560	
521	6.42	34.36	0.40	3.00	400	7.31	34.33	0.58	2.96	26.87	125.7	0.691	
692	5.26	34.40	0.33	3.18	500	6.56	34.36	0.44	3.00	27.00	114.3	0.811	
866	4.60	34.45	0.46	3.19	600	5.85	34.38	0.35	3.06	27.10	104.9	0.922	
					700	5.24	34.40	0.35	3.18	27.19	96.7	1.022	
					800	4.83	34.43	0.42	3.19	27.26	90.5	1.116	
					1000	(4.17)	(34.49)			(27.39)	(79.8)	(1.286)	

SIO
CCOFI
5004

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

117.35 CREST; April 11, 1950; 1127 GCT; 28°37'N, 115°16'W; sounding, 133 fm; wind, 290°, force 4; weather, partly cloudy; sea, rough; wire angle, 5°.

0	14.23	33.53	5.65	0.43	0	14.23	33.53	5.65	0.43	25.02	294.9	0.000
10	14.17	33.57	5.84	0.46	10	14.17	33.57	5.84	0.46	25.07	290.6	0.029
25	13.89	33.60	5.54	0.66	20	13.95	33.59	5.72	0.53	25.13	285.3	0.058
50	9.89	33.78	3.10	1.88	30	13.68	33.61	5.30	1.00	25.20	278.7	0.068
74	9.30	33.89	2.83	2.01	50	9.89	33.78	3.10	1.88	26.03	200.0	0.134
99	9.32	34.09	2.23	2.31a)	75	9.30	33.89	2.80	2.01	26.22	182.1	0.182
153	9.67	34.36	0.83	2.74	100	9.32	34.09	2.16	2.33	26.38	168.2	0.226
203	9.58	34.47	0.75	2.74	150	9.66	34.35	0.85	2.74	26.52	155.3	0.306
					200	9.59	34.46	0.75	2.74	26.62	147.0	0.382

120.35 CREST; April 10, 1950; 1655 GCT; 28°04'N, 114°54.5'W; 47 fm; wind, 360°, force 5; weather, cloudy; sea, rough; wire angle, 8°.

0	13.92	33.60	5.48	0.56	0	13.92	33.60	5.48	0.56	25.14	283.2	0.000
10	13.88	33.60	5.44	0.50	10	13.88	33.60	5.44	0.50	25.15	282.9	0.028
20	13.69	33.60	5.52	0.54	20	13.67	33.60	5.52	0.54	25.19	279.5	0.056
30	12.47	33.57	4.60	0.91	30	12.47	33.57	4.60	0.91	25.41	268.7	0.084
40	11.81	33.61	4.15	1.18	50	10.62	33.60	3.65	1.35	25.77	224.4	0.133
50	10.62	33.60	3.65	1.35								
59	10.28	33.68	3.02	1.54								

120.45 CREST; April 10, 1950; 1115 GCT; 27°39.5'N, 115°32'W; sounding, 1,400 fm; wind, 320°, force 6; weather, partly cloudy; sea, high; wire angle, 33°.

0	15.05	33.57	6.01	0.36	0	15.05	33.57	6.01	0.36	24.88	308.7	0.000
9	15.00	33.58	5.39	0.37	10	15.00	33.58	5.40	0.36	24.90	307.0	0.031
21	14.99	33.58	5.37	0.50	20	14.99	33.58	5.38	0.50	24.90	306.8	0.061
46	12.18	33.55	5.22	0.92	30	14.75	33.57	5.32	0.64	24.94	303.1	0.092
66	10.93	33.51	3.39	1.22	50	11.77	33.54	5.10	0.95	25.52	248.7	0.147
90	10.29	33.78	3.15	1.84	75	10.62	33.55	3.27	1.42	25.74	228.7	0.207
134	9.84	34.22	1.80	2.12	100	10.16	33.94	3.03	1.94	26.12	192.6	0.259
177	8.95	34.22	1.84	-	150	9.54	34.22	1.80	(2.20)	26.44	162.9	0.348
265	8.58	34.39	0.75	2.72	200	8.86	34.25	1.66	(2.46)	26.57	151.0	0.426
358	7.86	34.42	0.44	2.90	250	8.66	34.38	0.95	(2.67)	26.71	139.3	0.499
447	7.14	34.45	0.27	2.98	300	8.33	34.40	0.58	2.82	26.77	133.8	0.567
536	6.35	34.42	0.36	2.90	400	7.52	34.44	0.35	2.94	26.93	120.4	0.694
715	5.26	34.47	0.33	3.16	500	6.64	34.43	0.31	2.95	27.04	110.4	0.810
903	4.44	34.50	0.45	3.12	600	5.91	34.43	0.35	2.96	27.14	102.0	0.916
1096	3.78	34.52	0.76	3.08	700	5.33	34.47	0.34	3.14	27.24	92.8	1.013
					800	4.84	34.49	0.35	3.16	27.31	86.2	1.104
					1000	4.08	34.51	0.63	3.10	27.41	77.3	1.267

120.50 CREST; April 10, 1950; 0525 GCT; 27°31'N, 115°54'W; sounding, 2,225 fm; wind, 360°, force 5; weather, partly cloudy; sea, very rough; wire angle, 34°.

0	15.64	33.59	5.38	0.38	0	15.64	33.59	5.38	0.38	24.76	319.4	0.000
8	15.58	33.58	5.43	0.40	10	15.59	33.58	5.48	0.40	24.77	319.3	0.032
21	15.60	33.59	5.61	0.39	20	15.60	33.59	5.60	0.39	24.77	319.2	0.064
42	14.47	33.52	5.95	0.38	30	15.58	33.58	5.85	0.38	24.77	319.7	0.096
63	13.10	33.42	5.80	0.55	50	14.00	33.47	5.92	0.40	25.03	295.9	0.157
83	11.58	33.57	4.04	1.22	75	12.05	33.45	5.35	1.00	25.40	261.0	0.227
129	10.14	33.87	2.72	1.83	100	10.92	33.68	3.35	1.53	25.78	224.7	0.288
170	-	34.13	1.94	2.24	150	(9.56)	34.09	2.25	2.03	(26.34)	(172.9)	(0.387)
253	7.84	34.13	1.73	2.46	200	(8.54)	34.13	1.81	2.38	(26.53)	(155.1)	(0.469)
340	7.48	34.23	0.86	2.78	250	(7.88)	34.13	1.74	2.46	(26.63)	(146.2)	(0.545)
424	7.11	34.33	0.48	2.94	300	7.62	34.16	1.35	2.59	26.69	141.2	(0.616)
512	6.61	34.36	0.40	2.96	400	7.24	34.31	0.58	2.93	26.86	126.2	(0.750)
690	5.33	34.42	0.32	3.11	500	6.69	34.36	0.40	2.96	26.98	116.1	(0.871)
869	4.48	34.46	0.43	3.12	600	5.99	34.39	0.40	3.02	27.09	106.0	(0.982)
1057	3.83	34.49	0.65	3.12	700	5.27	34.42	0.33	3.12	27.21	95.7	(1.083)
					800	4.75	34.44	0.40	3.12	27.28	88.8	(1.175)
					1000	4.02	34.48	0.59	3.12	27.39	78.9	(1.343)

a) Alternate value, 2.20 μg at/L, not used in interpolation.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

CREST; April 9, 1950; 2345 GCT; 27°13.5'N, 116°33'W; sounding, 2,150 fm; wind, 340°, force 5; weather, partly cloudy; sea, high; wire angle, 28°. 120.60

0	16.94	33.69	5.52	0.41	0	16.94	33.69	5.52	0.41	24.54	340.4	0.000	
9	16.89	33.69	5.41	-	10	16.89	33.69	5.35	0.42	24.55	339.8	0.034	
22	16.55	33.66	5.18	0.45	20	16.62	33.67	5.18	0.44	24.60	335.2	0.068	
47	15.67	33.58	5.79	0.40	30	16.25	33.63	5.23	0.44	24.66	330.5	0.101	
68	14.18	33.40	5.83	0.42	50	15.52	33.57	5.80	0.40	24.78	319.6	0.166	
94	13.15	33.55	5.43	0.58	75	13.81	33.41	5.80	0.44	25.02	297.2	0.243	
140	10.60	33.62	5.15	-	100	12.60	33.56	5.35	0.64	25.38	263.8	0.313	
185	-	34.05	4.01	2.17	150	(10.49)	33.71	5.06	1.88	(25.88)	(216.3)	(0.434)	
278	9.31	34.42	2.42	2.74	200	(10.08)	34.14	3.57	2.27	(26.29)	(178.5)	(0.532)	
375	7.96	34.38	0.68	2.94	250	(9.68)	34.35	2.67	2.59	(26.52)	(157.6)	(0.616)	
469	7.10	34.41	0.48	2.98	300	8.91	34.41	2.07	2.82	26.69	141.8	(0.691)	
565	6.37	34.40	0.30	2.98	400	7.70	34.38	0.58	2.95	26.85	127.6	(0.825)	
758	5.20	34.43	0.35	3.18	500	6.86	34.41	0.40	2.98	26.99	114.9	(0.946)	
958	4.32	34.48	0.48	3.20	600	6.14	34.40	0.32	3.00	27.08	107.3	(1.058)	
1156	3.70	34.52	0.72	3.14	700	5.50	34.42	0.35	3.12	27.18	98.7	(1.160)	
					800	5.00	34.44	0.35	3.20	27.26	91.8	(1.256)	
					1000	4.15	34.49	0.52	3.20	27.39	79.5	(1.428)	

CREST; April 9, 1950; 1702, 1747 GCT; 26°51.5'N, 117°14'W; sounding, 2,000 fm; wind, 320°, force 5; weather, partly cloudy; sea, very rough; wire angle, 23°, 24°. 120.70

0	16.48	33.60	5.24	0.40	0	16.48	33.60	5.24	0.40	24.58	336.6	0.000	
10	16.43	33.62	5.46	0.38	10	16.43	33.62	5.46	0.38	24.61	334.3	0.034	
23	15.96	33.55	5.60	0.40	20	16.25	33.57	5.58	0.39	24.61	334.6	0.067	
46	15.43	33.51	5.41	0.41	30	15.63	33.53	5.57	0.40	24.72	324.3	0.100	
68	15.54	33.64	5.39	0.36	50	15.44	33.52	5.40	0.40	24.75	321.7	0.164	
90	14.24	33.55	5.61	0.47	75	15.52	33.64	5.43	0.37	24.83	315.1	0.244	
139	11.48	33.62	5.57	1.02	100	13.45	33.55	5.62	0.60	25.20	280.5	0.318	
183	-	33.77	3.79	1.65	150	(11.10)	33.65	5.45	1.15	(25.73)	(231.2)	(0.446)	
271	9.24	34.27	1.42	2.52	200	(10.02)	33.89	2.71	1.86	(26.10)	(196.2)	(0.554)	
362	8.80	34.43	0.57	2.82	250	(9.38)	34.18	1.65	2.37	(26.44)	(165.3)	(0.644)	
450	8.07	34.45	0.27	3.01	300	9.07	34.34	1.13	2.65	26.61	149.5	(0.722)	
544	6.50	34.38	0.44	3.08	400	8.57	34.45	0.35	2.91	26.78	135.6	(0.865)	
729	4.94	34.45	0.36	3.22	500	7.25	34.42	0.32	3.06	26.95	119.6	(0.992)	
916	4.20	34.49	0.70	3.20	600	5.87	34.39	0.45	3.13	27.11	104.4	(1.104)	
					700	5.08	34.44	0.37	3.20	27.24	91.7	(1.202)	
1029	3.90	34.54	0.86	3.17	800	4.62	34.47	0.45	3.22	27.32	84.8	(1.291)	
1221	3.42	34.56	-	-	1000	3.97	34.53	0.85	3.17	27.44	74.6	(1.450)	

CREST; April 9, 1950; 1147 GCT; 26°32'N, 117°51'W; sounding, 1,980 fm; wind, 300°, force 3; weather, partly cloudy; sea, very rough; wire angle, 17°. 120.80

0	16.82	33.62	4.87	0.39	0	16.82	33.62	4.87	0.39	24.52	342.6	0.000	
10	16.86	33.64	5.43	0.38	10	16.86	33.64	5.43	0.38	24.53	342.4	0.034	
24	16.14	33.58	5.05	0.41	20	16.70	33.59	5.10	0.40	24.52	342.9	0.068	
48	15.39	33.62	5.07	0.38	30	15.84	33.59	5.05	0.41	24.72	324.6	0.102	
71	13.26	33.37	5.20	0.50	50	15.17	33.62	5.07	0.38	24.89	308.6	0.165	
95	12.22	33.58	4.97	0.82	75	12.92	33.38	5.20	0.53	25.18	282.2	0.239	
192	11.46	33.93	2.98	1.92	100	12.13	33.62	4.88	0.95	25.51	250.5	0.306	
285	8.36	34.25	1.27	2.63	150	11.79	33.78	3.75	1.66	25.70	233.5	0.427	
382	7.39	34.33	0.69	2.83	200	11.30	33.97	2.82	1.96	25.94	211.9	0.538	
475	6.56	34.34	0.40	3.05	250	9.10	34.18	1.80	2.32	26.48	160.7	0.631	
573	5.94	34.38	0.39	3.00	300	8.16	34.27	1.10	2.69	26.70	140.9	0.706	
764	4.88	34.45	0.39	3.21	400	7.24	34.33	0.65	2.86	26.88	124.6	0.839	
956	4.14	34.51	0.55	3.16	500	6.40	34.35	0.40	3.04	27.01	113.0	0.958	
1157	3.64	34.52	0.75	3.12	600	5.76	34.39	0.40	3.00	27.12	103.2	1.066	
					700	5.21	34.42	0.40	3.12	27.21	94.9	1.165	
					800	4.70	34.46	0.40	3.22	27.30	86.7	1.256	
					1000	4.01	34.51	0.61	3.16	27.42	76.5	1.419	

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

120.90 CREST; April 9, 1950; 0632 GCT; 26°12.5'N, 118°29'W; sounding, 2,200 fm; wind, variable; force 1; weather, cloudy; sea, rough; wire angle, 0°.

0	16.42	33.44	5.45	0.42	0	16.42	33.44	5.45	0.42	24.47	347.2	0.000
10	15.61	33.42	5.61	0.41	10	15.61	33.42	5.61	0.41	24.64	331.3	0.034
25	15.35	33.39	5.67	0.41	20	15.42	33.40	5.66	0.41	24.67	329.1	0.067
50	14.56	33.37	5.73	0.42	30	15.26	33.39	5.69	0.41	24.70	326.7	0.100
75	14.09	33.31	5.83	0.46	50	14.56	33.37	5.73	0.42	24.82	315.1	0.164
99	12.76	33.28	5.91	0.59	75	14.09	33.31	5.83	0.46	24.89	309.9	0.242
154	11.10	33.57	4.38	1.13	100	12.75	33.28	5.90	0.59	25.13	287.2	0.317
203	–	34.02	2.40	2.16	150	11.18	33.54	4.50	1.10	25.63	240.6	0.448
301	8.38	34.23	1.32	2.58	200	10.09	34.01	2.45	2.13	26.18	188.3	0.556
405	7.50	34.29	0.83	2.79	250	9.14	34.16	1.70	2.46	26.46	163.0	0.644
504	6.50	34.34	0.35	3.00	300	8.40	34.23	1.32	2.58	26.63	147.3	0.721
607	5.90	34.38	0.39	3.08	400	7.54	34.29	0.85	2.78	26.81	131.9	0.861
810	4.82	34.45	0.40	3.09	500	6.53	34.34	0.35	3.00	26.98	115.6	0.984
1006	4.04	34.49	0.55	3.10	600	5.94	34.38	0.40	3.08	27.09	106.1	1.095
					700	5.38	34.42	0.39	3.08	27.19	97.0	1.197
					800	4.86	34.45	0.40	3.09	27.28	89.3	1.290
					1000	4.06	34.49	0.55	3.10	27.40	78.5	1.457

120.100 CREST; April 9, 1950; 0117 GCT; 26°52.5'N, 119°06'W; sounding, 2,290 fm; wind, 320°, force 2; weather, partly cloudy; sea, very rough; wire angle, 3°.

0	17.70	33.78	5.40	0.40	0	17.70	33.78	5.40	0.40	24.43	351.1	0.000
10	17.12	33.77	5.47	0.40	10	17.12	33.77	5.47	0.40	24.56	338.9	0.034
25	16.49	33.78	5.44	0.40	20	16.64	33.78	5.46	0.40	24.68	327.7	0.068
50	16.20	33.75	5.59	–	30	16.45	33.78	5.45	0.40	24.73	323.9	0.100
75	15.45	33.66	5.61	0.42	50	16.20	33.75	5.59	0.42	24.76	321.4	0.165
100	13.98	33.71	5.35	0.58	75	15.45	33.66	5.61	0.42	24.86	312.3	0.244
154	11.08	33.69	4.55	1.21	100	13.98	33.71	5.35	0.58	25.21	279.3	0.318
203	10.08	34.04	2.46	2.14	150	11.20	33.69	4.56	1.19	25.74	229.9	0.446
303	8.82	34.31	1.30	2.56	200	10.10	34.01	2.60	2.10	26.18	188.6	0.550
406	7.66	34.34	0.65	2.89	250	9.43	34.24	1.60	2.45	26.47	161.9	0.638
505	6.77	34.42	0.32	3.10	300	8.85	34.30	1.32	2.56	26.61	149.1	0.716
609	6.08	34.38	0.39	3.10	400	7.75	34.34	0.70	2.86	26.81	131.3	0.855
812	4.84	34.45	0.39	3.22	500	6.84	34.42	0.32	3.09	27.01	113.9	0.978
1010	4.11	34.49	0.62	3.36r	600	6.12	34.38	0.38	3.10	27.07	108.5	1.089
					700	5.50	34.40	0.40	3.14	27.16	100.1	1.193
					800	4.91	34.44	0.40	3.22	27.26	90.8	1.289
					1000	4.18	34.49	0.58		27.38	80.1	1.460

120.110 CREST; April 8, 1950; 2002 GCT; 25°31'N, 119°46'W; sounding, 2,300 fm; wind, 320°, force 4; weather, cloudy; sea, very rough; wire angle, 23°.

0	18.21	33.98	5.33	0.38	0	18.21	33.98	5.33	0.38	24.46	348.3	0.000
10	17.95	33.91	5.31	0.39	10	17.95	33.91	5.31	0.39	24.47	347.8	0.035
23	17.34	33.89	5.29	0.38	20	17.35	33.89	5.30	0.39	24.60	335.6	0.069
46	17.85	34.09	5.31	0.34	30	17.40	33.90	5.30	0.36	24.60	336.3	0.102
68	–	33.87	5.40	0.34	50	17.85	34.09	5.32	0.34	24.63	333.6	0.170
90	16.44	33.80	5.50	0.36	75	17.30	33.84	5.44	0.34	24.57	339.8	0.254
139	12.18	33.79	3.28	1.56	100	15.57	33.80	5.45	0.41	24.94	305.2	0.334
183	10.30	34.02	2.57	2.03	150	11.64	33.81	3.02	1.78	25.75	228.7	0.467
271	8.80	34.20	1.18	2.44	200	9.93	34.07	2.32	2.13	26.26	181.2	0.571
362	7.89	34.33	0.79	–	250	9.10	34.17	1.47	2.36	26.48	161.4	0.656
450	7.12	34.38	0.44	2.98	300	8.47	34.25	1.00	2.57	26.63	146.9	0.733
543	6.29	34.36	0.60	2.89	400	7.59	34.36	0.65	2.90	26.85	127.3	0.870
726	5.23	34.43	0.39	3.23	500	6.65	34.37	0.48	2.93	26.99	114.8	0.991
914	4.42	34.49	0.57	3.20	600	5.95	34.37	0.58	2.94	27.08	106.9	1.102
1115	3.82	34.52	0.75	3.16	700	5.36	34.41	0.42	3.20	27.19	97.5	1.204
					800	4.84	34.46	0.41	3.22	27.29	88.4	1.297
					1000	4.15	34.50	0.68	3.19	27.40	78.9	1.464

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

CREST; April 5, 1950; 1224 GCT; 27°16'N, 114°51'W; sounding, 450 fm; wind, 320°, force 2; weather, cloudy; sea, rough; wire angle, 38°. 123.40

0	14.72	33.57	5.27	0.30	0	14.72	33.57	5.27	0.30	24.95	301.7	0.000
8	14.67	33.57	5.29	0.34	10	14.66	33.57	(5.30)	(0.34)	24.96	300.8	0.030
20	14.58	33.57	-	-	20	14.58	33.57	(5.20)	(0.38)	24.98	299.7	0.060
40	13.91	33.60	4.94	0.45	30	14.29	33.59	(5.10)	(0.40)	25.06	292.4	0.090
58	11.44	33.53	3.76	0.61	50	12.50	33.57	4.55	0.51	25.40	259.8	0.145
76	10.64	33.58	3.71	1.32	75	10.65	33.58	3.70	1.29	25.75	227.0	0.206
114	9.90	33.98	2.17	1.98	100	10.12	33.88	3.30	1.85	26.08	196.4	0.259
147	-	34.09	2.04	2.17	150	9.31	34.09	2.00	2.17	26.38	168.9	0.350
180	9.04	34.13	1.82	2.28	200	9.26	34.24	1.40	2.36	26.50	158.0	0.432
212	9.36	34.34	1.02	2.42	250	9.43	34.43	0.56	2.60	26.62	147.7	0.508
250	9.43	34.43	0.56	2.60	300	8.90	34.40	0.48	2.63	26.69	142.4	0.580
286	9.06	34.40	0.53	2.62	400	7.81	34.41	0.25	2.90	26.86	127.0	0.715
362	8.24	34.42	0.28	2.84	500	6.83	34.40	0.25	3.00	26.99	115.2	0.836
448	7.31	34.40	0.25	2.93								
542	6.46	34.40	0.24	3.12								

CREST; April 5, 1950; 1804 GCT; 27°02'N, 115°30'W; sounding, 1,790 fm; wind, 320°, force 4; weather, overcast; sea, very rough; wire angle, 18°. 123.50

0	15.58	33.58	5.03	0.44	0	15.58	33.58	5.03	0.44	24.77	318.5	0.000
10	15.50	33.58	5.38	0.42	10	15.50	33.58	5.38	0.42	24.79	317.3	0.032
24	15.25	33.60	5.24	0.45	20	15.35	33.60	5.28	0.44	24.84	313.1	0.063
48	13.05	33.53	4.84	0.75	30	14.97	33.59	5.15	0.50	24.91	306.2	0.094
71	10.65	33.62	3.58	1.45	50	12.67	33.53	4.75	0.88	25.34	265.9	0.152
95	10.00	33.82	3.07	1.79	75	10.45	33.67	3.50	1.50	25.86	217.0	0.212
147	9.68	34.22	1.79	2.24	100	9.96	33.85	3.00	1.83	26.08	196.1	0.263
193	9.68	34.43	0.69	2.62	150	9.68	34.25	1.67	2.27	26.44	163.2	0.353
285	8.80	34.36	0.58	2.84	200	9.66	34.43	0.67	2.65	26.58	150.4	0.432
383	7.48	34.33	0.58	2.89	250	9.23	34.38	0.60	2.80	26.62	148.2	0.506
476	6.88	34.36	0.24	3.04	300	8.58	34.35	0.55	2.85	26.70	141.1	0.578
576	6.06	34.33	0.32	3.08	400	7.34	34.34	0.55	2.91	26.87	125.3	0.712
772	5.01	34.45	0.33	3.24	500	6.70	34.35	0.25	3.06	26.97	117.0	0.833
966	4.21	34.45	0.55	3.24	600	5.89	34.33	0.32	3.10	27.06	109.0	0.946
1169	3.68	34.52	0.70	3.15	700	5.36	34.41	0.32	3.20	27.19	97.5	1.049
					800	4.87	34.45	0.34	3.24	27.28	89.4	1.142
					1000	4.09	34.45	0.56	3.24	27.36	81.7	1.331

CREST; April 5, 1950; 2344 GCT; 26°38'N, 116°09'W; sounding, 2,200 fm; wind, 320°, force 3; weather, overcast; sea, very rough; wire angle, 15°. 123.60

0	16.37	33.60	5.20	0.33	0	16.37	33.60	5.20	0.33	24.60	334.6	0.000
10	16.21	33.62	5.16	0.35	10	16.21	33.62	5.16	0.35	24.66	329.9	0.033
24	16.25	33.73	5.30	0.35	20	16.25	33.72	5.27	0.35	24.73	323.5	0.066
48	15.80	33.62	5.64	0.36	30	16.20	33.70	5.40	0.35	24.72	324.2	0.098
72	15.23	33.57	5.42	0.36	50	15.76	33.61	5.64	0.36	24.75	321.7	0.163
96	13.42	33.42	5.55	0.53	75	15.00	33.55	5.43	0.37	24.88	310.9	0.242
147	10.58	33.61	3.73	1.46	100	13.07	33.42	5.53	0.58	25.18	282.7	0.316
194	9.49	33.95	2.70	2.03	150	10.40	33.64	3.55	1.47	25.84	219.9	0.442
287	8.78	34.27	1.16	2.71	200	9.40	33.98	2.60	2.12	26.28	179.4	0.542
383	8.45	34.42	0.39	2.99	250	8.95	34.18	1.77	2.58	26.50	158.6	0.626
476	7.36	34.40	0.28	3.06	300	8.74	34.29	1.00	2.75	26.63	148.1	0.702
574	6.25	34.29u	0.48	3.19	400	8.31	34.42	0.35	3.00	26.79	133.8	0.843
771	5.13	34.45	0.33	3.20	500	7.07	(34.39)	0.31	3.10	(26.95)	(119.3)	(0.970)
967	4.36	34.49	0.44	3.16	600	6.04	(34.39)	0.50	3.18	(27.09)	(106.6)	(1.083)
1171	3.68	34.56	0.69	3.10	700	5.44	(34.42)	0.40	3.19	(27.18)	(97.9)	(1.185)
					800	5.00	34.46	0.33	3.19	27.27	90.4	(1.279)
					1000	4.26	34.50	0.45	3.15	27.38	80.1	(1.450)

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

127.40 CREST; April 6, 1950; 1514 GCT; 26°43'N, 114°29.5'W; sounding, 1,950; wind, 330°, force 2; weather, overcast; sea, very rough; wire angle, 13°.

0	17.17	33.95	5.29	0.39	0	17.17	33.95	5.29	0.39	24.69	326.6	0.000
10	17.03	33.95	5.32	0.40	10	17.03	33.95	5.32	0.40	24.72	324.2	0.032
24	17.04	33.95	5.05	0.40	20	17.04	33.95	5.07	0.41	24.72	324.4	0.065
48	16.32	33.84	5.35	0.39	30	17.04	33.93	5.06	0.40	24.70	326.2	0.098
72	14.61	33.78	4.21	0.94	50	16.05	33.82	5.35	0.38	24.85	312.8	0.161
96	13.28	34.02	2.38	1.68	75	14.35	33.79	3.10	1.20	25.20	280.1	0.235
149	11.68	34.33	1.24	2.05	100	13.12	34.07	2.27	1.72	25.67	235.9	0.300
195	10.32	34.40	0.99	2.48	150	11.64	34.33	1.20	2.07	26.16	190.5	0.407
289	9.18	34.45	0.58	2.66	200	10.24	34.41	0.96	2.52	26.47	161.4	0.494
386	8.03	34.42	0.34	2.68	250	9.60	34.44	0.75	2.62	26.60	149.7	0.572
480	7.14	34.43	0.25	2.82	300	9.04	34.45	0.55	2.67	26.70	141.0	0.645
580	6.27	34.42	0.38	2.85	400	7.87	34.42	0.33	2.69	26.86	127.0	0.779
776	5.12	34.43	0.30	2.90	500	6.95	34.43	0.26	2.84	27.00	114.7	0.900
971	4.26	34.49	0.47	2.88	600	6.12	34.42	0.35	2.86	27.10	105.6	1.010
1173	3.66	34.52	0.61	2.92	700	5.45	34.43	0.33	2.90	27.19	97.3	1.111
					800	5.00	34.43	0.30	2.90	27.25	92.5	1.206
					1000	4.13	34.50	0.53	2.88	27.40	78.7	1.377

127.50 CREST; April 6, 1950; 0959 GCT; 26°21.5'N, 115°11.5'W; sounding, 1,750 fm; wind, 340°, force 4; weather, overcast; sea, very rough; wire angle, 15°.

0	15.87	33.60	5.60	0.42	0	15.87	33.60	5.60	0.42	24.72	323.6	0.000
10	15.83	33.62	5.54	0.38	10	15.83	33.62	5.54	0.38	24.75	321.3	0.032
24	15.47	33.58	5.56	0.42	20	15.60	33.59	5.55	0.40	24.77	319.1	0.064
48	14.67	33.55	5.66	0.46	30	15.34	33.57	5.59	0.44	24.82	315.4	0.096
72	13.05	33.51	5.06	0.63	50	14.57	33.55	5.65	0.46	24.97	301.5	0.158
96	11.06	33.55	4.20	1.24	75	12.75	33.51	4.95	0.70	25.31	269.5	0.229
148	10.25	34.09	1.96	2.08	100	10.92	33.56	4.10	1.38	25.69	233.6	0.292
195	10.49	34.43	0.95	2.50	150	10.25	34.12	1.85	2.09	26.24	181.9	0.396
287	9.32	34.38	0.43	2.66	200	10.48	34.43	0.87	2.52	26.44	164.1	0.482
382	7.76	34.34	0.48	2.76	250	10.00	34.41	0.49	2.63	26.51	158.4	0.562
473	6.94	34.42	0.29	2.84	300	9.00	34.37	0.42	2.68	26.65	146.3	0.639
568	6.20	34.42	0.37	3.12	400	7.57	34.35	0.45	2.78	26.85	127.9	0.776
757	5.06	34.47	0.29	3.12	500	6.72	34.42	0.29	2.93	27.02	112.2	0.896
945	4.28	34.47	0.45	3.10	600	5.97	34.43	0.38	3.12	27.13	102.8	1.004
1145	3.60	34.51	0.74	3.08	700	5.34	34.46	0.32	3.12	27.23	93.6	1.102
					800	4.88	34.47	0.30	3.12	27.29	88.1	1.193
					1000	4.04	34.48	0.50	3.10	27.39	79.1	1.360

127.60 CREST; April 6, 1950; 0444 GCT; 26°04'N, 115°47'W; sounding, 2,120 fm; wind, 320°, force 3; weather, overcast; sea, very rough; wire angle, 10°.

0	16.01	33.64	4.70	0.44	0	16.01	33.64	4.70	0.44	24.72	324.0	0.000
10	15.97	33.64	4.94	0.44	10	15.97	33.64	4.94	0.44	24.73	322.7	0.032
25	15.92	33.66	4.55	0.51	20	15.94	33.65	4.65	0.50	24.74	322.0	0.064
49	15.18	33.51	5.54	0.54	30	15.86	33.66	4.65	0.52	24.77	319.8	0.097
73	14.81	33.53	5.25	0.78	50	15.17	33.51	5.54	0.55	24.81	316.6	0.160
98	13.14	33.49	4.12	0.80	75	14.73	33.52	5.18	0.78	24.91	307.7	0.238
152	10.50	34.05	2.19	2.19	100	13.04	33.49	3.75	0.80	25.24	276.8	0.311
201	10.41	34.38	1.18	2.68	150	10.53	34.04	2.22	1.40	26.13	192.8	0.411
297	8.95	34.34	0.62	3.01	200	10.42	34.38	1.22	2.68	26.42	166.7	0.519
398	7.88	34.31	0.49	3.10	250	9.58	34.36	0.75	2.90	26.55	155.1	0.599
495	6.86	34.34	0.25	3.13	300	8.92	34.34	0.61	3.02	26.63	147.3	0.675
597	6.12	34.45	0.30	3.18	400	7.86	34.31	0.47	3.10	26.77	135.2	0.815
798	5.00	34.43	0.32	3.19	500	6.82	34.35	0.25	3.13	26.95	119.0	0.943
996	4.17	34.42	0.52	3.18	600	6.10	34.45	0.30	3.18	27.13	103.2	1.054
1201	3.56	34.49	0.72	3.08	700	5.51	34.44	0.30	3.18	27.19	97.2	1.154
					800	5.00	34.43	0.33	3.19	27.25	92.5	1.250
					1000	4.16	34.42	0.54	3.18	27.33	84.9	1.427

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OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
CREST; April 6, 1950; 2147 GCT; 26°16'N, 113°45'W; sounding, 320 fm; wind, 320°, force 2; weather, overcast; sea, rough; wire angle, 0°.													130.35
0	16.01	–	5.85	0.30	0	16.01	(33.62)	5.85	0.30	(24.70)	(325.2)	(0.000)	
10	15.06	33.62	6.00	0.32	10	15.06	33.62	6.00	0.32	24.92	305.1	0.031	
25	13.48	33.62	5.26	0.67	20	13.95	33.62	5.70	0.45	25.15	283.1	0.061	
49	11.18	33.64	4.14	1.18	30	13.00	33.62	4.95	0.88	25.34	265.0	0.088	
74	10.56	33.60	3.20	1.54	50	11.15	33.64	4.12	1.20	25.71	230.7	0.138	
99	10.93	33.77	1.50	2.18	75	10.56	33.60	3.15	1.54	25.78	224.1	0.195	
153	10.59	34.23	0.70	2.50	100	10.94	33.78	1.48	2.18	25.86	217.6	0.250	
203	10.30	34.40	0.34	2.56	150	10.63	34.23	0.73	2.48	26.26	180.4	0.349	
253	9.60	34.51	0.44	2.60	200	10.31	34.39	0.35	2.56	26.44	164.0	0.435	
302	9.10	34.51	0.35	2.64	250	9.65	34.50	0.43	2.60	26.64	146.1	0.513	
356	8.40	34.49	0.32	2.68	300	9.13	34.51	0.35	2.63	26.71	137.9	0.584	
406	7.75	34.43	0.25	2.71	400	7.85	34.43	0.25	2.71	26.87	126.1	0.716	
456	7.24	34.43	0.24	2.58r	500	6.75	34.46	0.22	2.78	27.05	109.8	0.834	
506	6.68	34.47	0.21	2.79a)									
CREST; April 7, 1950; 0302 GCT; 26°09'N, 114°07.5'W; sounding, 1,800 fm; wind, 260°, force 3; weather, partly cloudy; sea, rough; wire angle, 15°.													130.40
0	15.74	33.58	5.66	0.39	0	15.74	33.58	5.66	0.39	24.73	322.4	0.000	
10	15.42	33.55	5.67	0.38	10	15.42	33.55	5.67	0.38	24.78	318.2	0.032	
24	15.41	33.57	5.74	0.38	20	15.41	33.56	5.72	0.38	24.79	317.1	0.064	
48	13.83	33.62	5.61	0.56	30	15.40	33.59	5.72	0.39	24.82	315.2	0.095	
73	12.42	33.53	4.78	0.96	50	13.60	33.62	5.58	0.63	25.22	276.9	0.155	
96	10.74	33.66	3.57	1.51	75	12.35	33.53	4.65	1.00	25.40	260.6	0.222	
149	10.28	34.14	1.68	2.16	100	10.71	33.73	3.40	1.58	25.86	217.4	0.282	
196	9.82	34.33	0.41	2.54	150	10.27	34.16	1.61	2.17	26.27	179.3	0.381	
287	9.00	34.43	0.44	2.78	200	9.78	34.34	0.40	2.56	26.49	159.1	0.465	
384	7.90	34.40	0.73	2.86	250	9.35	34.41	0.43	2.72	26.62	147.9	0.542	
476	6.80	34.42	0.29	3.00	300	8.87	34.43	0.48	2.80	26.71	139.8	0.614	
573	6.22	34.40	0.25	2.98	400	7.68	34.40	0.68	2.87	26.87	125.7	0.747	
764	5.04	34.45	0.30	3.09	500	6.62	34.42	0.27	3.00	27.04	110.8	0.865	
949	4.28	34.47	0.51	3.00	600	6.05	34.40	0.25	2.99	27.09	106.1	0.973	
1145	3.74	34.50	0.67	3.06	700	5.44	34.42	0.27	3.05	27.19	97.7	1.075	
					800	4.83	34.46	0.33	3.08	27.29	88.3	1.168	
					1000	4.14	34.47	0.57	3.00	27.37	81.1	1.337	
CREST; April 7, 1950; 0817 GCT; 25°49'N, 114°46.5'W; sounding, 1,850 fm; wind, 220°, force 2; weather, partly cloudy; sea, moderate; wire angle, 7°.													130.50
0	16.68	33.77	5.44	0.39	0	16.68	33.77	5.44	0.39	24.67	328.7	0.000	
10	16.55	33.75	5.56	0.35	10	16.55	33.75	5.56	0.35	24.68	327.6	0.033	
25	16.47	33.77	5.69	0.38	20	16.50	33.77	5.67	0.37	24.71	325.3	0.065	
50	15.51	33.68	5.70	0.36	30	16.45	33.76	5.70	0.38	24.71	325.2	0.098	
75	14.56	33.58	6.06	0.46	50	15.51	33.68	5.70	0.36	24.86	311.5	0.162	
99	12.32	33.58	4.58	1.02	75	14.56	33.58	6.06	0.46	24.99	300.0	0.238	
153	11.72	34.20	1.68	2.25	100	12.31	33.58	4.52	1.20	25.44	257.0	0.308	
202	11.17	–	0.42	2.72	150	11.73	34.20	1.73	2.23	26.04	201.6	0.423	
300	9.61	34.49	0.36	2.81	200	11.20	34.36	0.42	2.71	26.26	181.6	0.518	
402	8.27	34.51	0.25	2.90	250	10.45	34.45	0.40	2.78	26.46	163.2	0.604	
500	7.08	34.40	0.21	3.04	300	9.61	34.49	0.36	2.81	26.64	147.3	0.682	
601	6.16	34.36	0.28	3.12	400	8.26	34.51	0.25	2.90	26.87	126.5	0.818	
802	4.90	34.49	0.38	3.22	500	7.08	34.40	0.21	3.04	26.96	118.5	0.942	
1000	4.19	34.51	0.95r	3.17	600	6.17	34.36	0.26	3.12	27.05	110.6	1.056	
1203	3.65	34.49	0.69	3.06	700	5.45	34.42	0.32	3.18	27.18	97.9	1.160	
					800	4.92	34.49	0.37	3.22	27.30	87.3	1.252	
					1000	4.19	34.51	0.49	3.17	27.40	78.5	1.419	

a) Alternate value, 2.68 μg at/L, not used in interpolation.

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

130.60 CREST; April 7, 1950; 1332 GCT; 25°29'N, 115°24'W; sounding, 2,100 fm; wind, 150°, force 2; weather, overcast; sea, moderate; wire angle, 4°.

0	18.15	34.19	5.06	0.41	0	18.15	34.19	5.06	0.41	24.63	331.9	0.000
10	18.13	34.17	5.46	0.40	10	18.13	34.17	5.46	0.40	24.63	332.2	0.033
25	18.07	34.16	4.72	0.36	20	18.09	34.17	5.00	0.36	24.63	332.6	0.066
49	17.62	34.11	5.16	0.39	30	18.04	34.15	4.73	0.36	24.63	333.3	0.100
74	14.47	33.86	3.87	1.10	50	17.55	34.11	5.16	0.39	24.72	325.3	0.166
99	13.00	34.07	2.23	1.86	75	14.45	33.86	3.80	1.20	25.23	277.0	0.241
153	11.33	34.40	1.04	2.48a)	100	12.85	34.08	2.19	1.88	25.73	229.9	0.304
203	10.79	34.55	0.58	2.67	150	11.38	34.39	1.07	2.46	26.25	181.5	0.407
302	9.29	34.49	0.49	2.82	200	10.83	34.55	0.60	2.66	26.47	161.3	0.493
406	8.16	34.47	0.31	2.89	250	10.02	34.52	0.50	2.74	26.59	150.7	0.570
505	7.05	34.45	-	-	300	9.30	34.49	0.50	2.82	26.70	141.7	0.644
609	6.16	34.43	0.30	3.00	400	8.22	34.47	0.32	2.88	26.84	128.7	0.779
812	4.96	34.48	0.32	3.22	500	7.10	34.45	0.30	2.96	26.99	115.3	0.901
1012	4.12	34.50	0.58	3.12	600	6.21	34.43	0.30	3.00	27.10	106.0	1.012
1217	3.56	34.56	0.83	3.13	700	5.58	34.45	0.30	3.10	27.19	97.3	1.113
					800	5.02	34.47	0.32	3.21	27.28	89.9	1.207
					1000	4.14	34.50	0.55	3.13	27.40	78.8	1.376

130.70 CREST; April 7, 1950; 1847 GCT; 25°12'N, 116°03'W; sounding, 2,050 fm; wind, 200°, force 2; weather, overcast; sea, moderate; wire angle, 2°.

0	18.23	34.13	5.21	0.48	0	18.23	34.13	5.21	0.48	24.57	338.1	0.000
10	18.09	34.14	5.27	0.48	10	18.09	34.14	5.27	0.48	24.62	333.9	0.034
24	18.07	34.14	5.27	0.46	20	18.07	34.14	5.27	0.47	24.62	334.1	0.067
49	17.12	33.93	5.38	0.44	30	18.06	34.12	5.30	0.45	24.60	335.9	0.100
73	14.62	33.68	5.53	0.58	50	16.95	33.93	5.38	0.44	24.73	324.5	0.166
98	12.03	33.62	4.27	1.25	75	14.30	33.67	5.53	0.58	25.12	288.0	0.243
153	9.94	34.03	2.38	2.12	100	11.65	33.62	4.00	1.30	25.60	241.8	0.309
201	9.87	34.29	1.34	2.66	150	9.97	33.99	2.45	2.09	26.19	186.9	0.417
300	8.99	34.42	0.50	2.95	200	9.88	34.29	1.35	2.64	26.44	164.0	0.504
404	7.86	34.43	0.27	3.15	250	9.55	34.38	0.81	2.86	26.56	153.3	0.583
502	6.83	34.42	0.23	3.20	300	8.99	34.42	0.50	2.95	26.69	142.2	0.658
606	5.95	34.40	0.32	3.12	400	7.89	34.43	0.28	3.14	26.87	126.6	0.792
809	4.82	34.47	0.32	3.42	500	6.85	34.42	0.25	3.20	27.00	114.1	0.912
1008	4.12	34.49	0.52	3.56	600	5.98	34.40	0.31	3.13	27.10	105.1	1.022
1212	3.53	34.48	0.87	3.09	700	5.31	34.42	0.32	3.22	27.20	96.2	1.123
					800	4.87	34.46	0.32	3.40	27.29	88.7	1.215
					1000	4.14	34.49	0.50	3.56	27.39	79.6	1.383

130.80 CREST; April 8, 1950; 0002 GCT; 24°49'N, 116°40'W; sounding, 2,150 fm; wind, 240°, force 1; weather, cloudy; sea, moderate; wire angle, 0°.

0	18.03	33.91	5.38	0.38	0	18.03	33.91	5.38	0.38	24.45	349.5	0.000
10	17.68	33.89	5.87	0.38	10	17.68	33.89	5.87	0.38	24.52	343.0	0.035
25	17.58	33.87	5.66	0.36	20	17.62	33.88	5.73	0.36	24.53	342.5	0.069
50	17.26	33.84	5.54	0.37	30	17.55	33.87	5.62	0.36	24.54	342.0	0.103
75	16.09	33.75	5.51	0.43	50	17.26	33.84	5.54	0.37	24.58	338.2	0.171
100	13.98	33.60	5.39	0.54	75	16.09	33.75	5.51	0.43	24.79	319.4	0.253
155	10.72	33.78	3.10	1.85	100	13.98	33.60	5.39	0.54	25.13	287.3	0.329
204	10.09	34.23	1.59	2.44	150	10.80	33.75	3.50	1.70	25.86	218.5	0.455
303	8.36	34.20	1.13	2.71	200	10.17	34.23	1.65	2.42	26.34	173.5	0.554
406	7.61	34.36	0.53	2.96	250	9.22	34.22	1.28	2.61	26.49	159.8	0.637
504	6.45	34.34	0.31	3.10	300	8.40	34.20	1.14	2.71	26.61	149.5	0.714
607	6.03	34.40	0.25	3.10	400	7.65	34.36	0.56	2.94	26.84	128.2	0.853
809	5.00	34.49	0.31	3.21	500	6.48	34.34	0.32	3.10	26.99	114.8	0.974
1006	4.21	34.54	0.49	3.24	600	6.07	34.39	0.25	3.10	27.08	107.1	1.085
1210	3.59	34.58	0.78	3.11	700	5.54	34.45	0.26	3.15	27.20	97.0	1.187
					800	5.02	34.49	0.30	3.20	27.29	88.4	1.280
					1000	4.24	34.54	0.49	3.24	27.42	77.2	1.446

a) Alternate value, 2.35 μg at/L, not used in interpolation.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

BLACK DOUGLAS; May 17, 1950; 0116 GCT; 41°33'N, 125°00'W; sounding, 710 fm; wind, 320°, force 3; weather, overcast; sea, very rough; wire angle, 1°. 40.45

0	8.44	33.46	4.64	0	8.44	33.46	4.64	26.02	199.4	0.000
10	8.35	33.41	4.65	10	8.35	33.41	4.65	25.99	202.3	0.020
25	8.09	33.62	4.53	20	8.19	33.57	4.62	26.14	188.2	0.040
50	7.82	33.69	4.21	30	8.01	33.64	4.50	26.23	180.6	0.058
75	7.78	33.71	4.33	50	7.82	33.69	4.21	26.29	174.5	0.094
100	7.76	33.75	4.25	75	7.78	33.71	4.33	26.31	172.9	0.137
154	7.45	33.87	2.44	100	7.76	33.75	4.25	26.35	169.9	0.180
202	6.88	33.96	1.83	150	7.50	33.85	2.57	26.46	159.8	0.262
296	5.93	34.02	1.21	200	6.91	33.95	1.85	26.63	145.1	0.339
392	5.45	34.11	0.72	250	6.37	34.00	1.45	26.74	135.0	0.408
484	5.16	34.17	0.59	300	5.91	34.02	1.19	26.81	128.5	0.474
580	4.88	34.22	0.62	400	5.41	34.12	0.70	26.95	116.0	0.597
672	4.58	34.23	0.50	500	5.13	34.18	0.60	27.03	109.3	0.709
770	4.26	34.33	0.38	600	4.82	34.21	0.62	27.09	104.4	0.816
866	3.94	34.31	0.37	700	4.49	34.25	0.45	27.16	98.5	0.917
				800	4.17	34.32	0.40	27.23	91.9	1.013
				1000	(3.59)	(34.39)		(27.36)	(80.1)	(1.186)

BLACK DOUGLAS; May 16, 1950; 2055 GCT; 41°23'N, 125°23'W; sounding, 1,705 fm; wind, 330°, force 5; weather, partly cloudy; sea, rough; wire angle, 5°. 40.50

0	10.34	32.65	6.31	0	10.34	32.65	6.31	25.09	288.4	0.000
10	9.68	32.68	6.37	10	9.68	32.68	6.37	25.22	276.2	0.028
24	9.26	32.74	6.29	20	9.36	32.73	6.35	25.31	267.8	0.055
54	8.52	33.03	5.52	30	9.14	32.79	6.23	25.39	260.2	0.082
79	8.41	33.06	5.40	50	8.56	33.02	5.57	25.66	234.9	0.131
108	8.27	33.26	5.03	75	8.42	33.05	5.45	25.70	231.0	0.190
162	8.19	33.51	3.90	100	8.33	33.13	5.17	25.78	224.2	0.246
216	7.28a)	33.91	2.49	150	8.20	33.46	4.27	26.06	198.7	0.352
322	6.27	34.03	1.59	200	7.61	33.78	2.82	26.39	167.3	0.443
431	5.71	34.13	0.92	250	6.89	33.98	2.13	26.65	143.4	0.522
536	5.13	34.18	0.62	300	6.48	34.02	1.73	26.74	135.7	0.591
641	4.61	34.26	0.41	400	5.82	34.09	1.09	26.88	123.3	0.720
848	3.94	34.36	0.34	500	5.35	34.17	0.70	27.00	112.7	0.838
1057	3.50	34.43	0.56	600	4.79	34.22	0.48	27.10	103.3	0.946
1258	3.05	34.47	0.68	700	4.38	34.30	0.37	27.21	93.5	1.045
				800	4.06	34.35	0.34	27.29	86.9	1.135
				1000	3.59	34.41	0.50	27.38	78.7	1.301

BLACK DOUGLAS; May 16, 1950; 1321 GCT; 41°03'N, 126°09'W; sounding, 1,680 fm; wind, 340°, force 5; weather, clear; sea, high; wire angle, 14°. 40.60

0	10.42	32.65	6.39	0	10.42	32.65	6.39	25.07	290.0	0.000
9	10.47	32.66	6.17	10	10.47	32.66	6.17	25.07	290.5	0.029
24	10.38	32.63	6.24	20	10.39	32.63	6.22	25.06	291.4	0.058
53	10.44	32.66	6.36	30	10.37	32.63	6.27	25.06	291.3	0.087
77	10.42	32.66	6.29	50	10.42	32.66	6.36	25.08	290.3	0.145
106	9.01	32.97	5.57	75	10.42	32.66	6.34	25.08	290.8	0.218
159	8.54	33.69	3.33	100	9.35	32.70	5.87	25.29	271.3	0.288
211	7.86	33.91	2.75	150	8.63	33.65	3.48	26.14	190.9	0.404
313	6.53	34.04	1.93	200	8.04	33.87	2.90	26.40	166.8	0.493
417	5.87	34.09	1.20	250	7.29	33.99	2.43	26.60	148.1	0.571
517	5.21	34.11	0.85	300	6.66	34.03	2.02	26.72	137.3	0.643
616	4.78	34.23	0.55	400	5.98	34.08	1.31	26.85	126.1	0.775
812	4.12	34.35	0.40	500	5.34	34.11	0.92	26.95	117.0	0.897
1014	3.58	34.41	0.57	600	4.84	34.20	0.60	27.08	105.3	1.008
1214	3.10	34.47	0.63	700	4.49	34.31	0.45	27.21	94.0	1.108
				800	4.16	34.35	0.40	27.27	88.1	1.199
				1000	3.61	34.40	0.55	27.37	79.6	1.366

a) Alternate value, 7.50°C, not used in interpolation.

S10

CCOFI
5005

OBSERVED					INTERPOLATED					COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m

40.70 BLACK DOUGLAS; May 16, 1950; 0611 GCT; 40°42'N, 126°55'W; sounding, 1,690 fm; wind, 350°, force 7; weather, clear; sea, high; wire angle, 9°.

0	10.67	32.66	6.24	0	10.67	32.66	6.24	25.03	293.4	0.000
10	10.73	32.66	6.15	10	10.73	32.66	6.15	25.02	294.6	0.029
24	10.64	32.66	6.02	20	10.66	32.66	6.08	25.04	293.6	0.059
53	10.66	32.66	6.22	30	10.64	32.66	6.05	25.04	293.5	0.088
77	8.57	32.75	5.96	50	10.67	32.66	6.22	25.03	294.4	0.147
106	9.44	33.22	4.84	75	8.59	32.73	6.03	25.43	257.3	0.216
156	8.48	33.64	3.47	100	9.41	33.09	5.30	25.58	243.4	0.278
206	7.49	33.86	3.27	150	8.60	33.61	3.55	26.11	193.4	0.388
302	6.68	34.02	2.23	200	7.58	33.84	3.29	26.45	162.5	0.476
401	5.86	34.07	1.28	250	7.07	33.96	2.93	26.61	147.3	0.554
493	5.25	34.16	0.82	300	6.69	34.02	2.28	26.71	138.5	0.625
587	4.74	34.22	0.52	400	5.88	34.07	1.29	26.85	125.6	0.758
775	4.12	34.33	0.37	500	5.20	34.16	0.78	27.01	111.6	0.876
972	3.61	34.43	0.43	600	4.68	34.23	0.50	27.12	101.2	0.982
1170	3.16	34.49	0.60	700	4.34	34.28	0.38	27.20	94.5	1.080
				800	4.07	34.34	0.36	27.28	87.8	1.171
				1000	3.56	34.44	0.45	27.41	76.1	1.335

40.80 BLACK DOUGLAS; May 15, 1950; 2203 GCT; 40°23'N, 127°40'W; sounding, 820 fm; wind, 010°, force 7; weather, clear; sea, high; wire angle, 17°.

0	10.73	32.72	6.13	0	10.73	32.72	6.13	25.07	290.0	0.000
10	10.76	32.68	6.09	10	10.76	32.68	6.09	25.04	292.9	0.029
24	10.64	32.70	6.24	20	10.66	32.70	6.24	25.07	290.7	0.058
48	10.65	32.68	6.24	30	10.66	32.70	6.24	25.07	290.9	0.087
72	8.61	32.63	6.40	50	10.65	32.68	6.25	25.05	292.6	0.146
96	7.84	32.65	6.20	75	8.35	32.63	6.42	25.39	261.2	0.215
147	8.46	33.60	3.73	100	7.82	32.66	6.14	25.49	251.9	0.279
195	8.06	33.86	2.78	150	8.47	33.62	3.72	26.14	190.8	0.390
287	6.71	34.05	1.92	200	8.01	33.88	2.72	26.41	165.6	0.479
383	6.04	34.14	1.14	250	7.22	33.99	2.22	26.61	147.1	0.556
474	5.45	34.20	0.81	300	6.58	34.07	1.80	26.76	133.3	0.627
567	4.99	34.25	0.35	400	5.91	34.15	1.05	26.91	120.0	0.754
750	4.20	34.36	0.41	500	5.29	34.22	0.65	27.05	108.2	0.868
931	3.63	34.43	0.52	600	4.81	34.27	0.35	27.14	99.8	0.972
1124	3.21	34.49	0.64	700	4.39	34.33	0.37	27.23	91.3	1.067
				800	4.02	34.39	0.43	27.32	83.5	1.155
				1000	3.47	34.45	0.60	27.42	74.3	1.313

40.90 BLACK DOUGLAS; May 15, 1950; 1307 GCT; 40°02'N, 128°25'W; sounding, 2,460 fm; wind, 010°, force 8; weather, clear; sea, high; wire angle, 0°.

0	11.54	32.83	6.13	0	11.54	32.83	6.13	25.01	295.6	0.000
10	11.58	32.82	6.13	10	11.58	32.82	6.13	25.00	297.1	0.030
25	11.49	32.82	6.03	20	11.51	32.82	6.06	25.01	296.2	0.059
55	11.55	32.81	6.07	30	11.47	32.82	6.03	25.02	295.8	0.089
80	8.96	32.65	6.25	50	11.54	32.81	6.05	25.00	298.1	0.148
110	8.25	32.81	5.71	75	9.15	32.65	6.25	25.28	271.5	0.219
140	8.55	33.10	5.16	100	8.32	32.75	5.86	25.48	252.6	0.285
189	7.82	33.84	3.06	150	8.54	33.34	4.70	25.91	212.8	0.402
287	6.80	33.80	2.70	200	7.66	33.84	2.96	26.43	163.6	0.495
391	5.80	34.06	1.32	250	7.12	33.82	2.74	26.49	158.4	0.576
491	5.36	34.11	0.82	300	6.68	33.81	2.68	26.55	153.9	0.654
593	4.58	34.14	0.75	400	5.75	34.07	1.23	26.87	123.9	0.793
797	3.94	34.31	0.36	500	5.34	34.11	0.81	26.95	117.0	0.914
1007	3.43	34.42	0.40	600	4.54	34.14	0.74	27.07	106.2	1.025
1211	3.04	34.49	0.62	700	4.14	34.22	0.57	27.17	96.6	1.127
				800	3.93	34.31	0.36	27.27	88.4	1.219
				1000	3.45	34.42	0.40	27.40	76.3	1.384

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

BLACK DOUGLAS; May 15, 1950; 0303 GCT; 39°42'N, 129°10'W; sounding, 2,520 fm; wind, 010°, force 7; weather, cloudy; sea, high; wire angle, 0°. 40.100

0	10.98	32.68	6.21	0	10.98	32.68	6.21	25.00	296.7	0.000
10	11.04	32.66	6.21	10	11.04	32.66	6.21	24.97	299.8	0.030
25	10.93	32.65	6.24	20	10.96	32.65	6.22	24.98	299.4	0.060
55	10.00	32.65	6.57	30	10.91	32.65	6.28	24.98	298.7	0.090
80	9.23	32.57	6.47	50	10.50	32.65	6.55	25.06	292.3	0.149
109	8.78	-	6.17	75	9.30	32.57	6.49	25.19	279.7	0.220
163	7.65	33.19	4.94	100	8.95	32.59	6.25	25.26	273.4	0.289
216	7.32	33.71	3.96	150	7.75	33.05	5.24	25.80	222.7	0.414
322	6.42	33.98	2.18	200	7.43	33.59	4.23	26.27	178.9	0.514
432	5.48	34.08	1.18	250	7.09	33.88	3.40	26.55	153.5	0.597
538	4.64	34.13	0.85	300	6.60	33.97	2.55	26.68	141.0	0.671
644	4.28	34.21	0.54	400	5.69	34.04	1.40	26.85	125.4	0.804
854	3.68	34.34	0.43	500	4.93	34.12	0.93	27.01	111.3	0.922
1065	3.26	34.43	0.53	600	4.38	34.17	0.67	27.11	102.2	1.029
1269	2.90	34.47	0.71	700	4.14	34.25	0.46	27.20	94.4	1.127
				800	3.86	34.31	0.43	27.27	87.6	1.218
				1000	3.36	34.41	0.49	27.40	76.0	1.382

BLACK DOUGLAS; May 14, 1950; 1754, 1625 GCT; 39°23'N, 129°55'W; sounding, 2,460 fm; wind, 010°, force 7; weather, overcast; sea, high; wire angle, 13°, 0°. 40.110

0	11.96	32.81	5.90	0	11.96	32.81	5.90	24.92	304.6	0.000
9	11.98	32.81	5.82	10	11.98	32.81	5.82	24.91	305.0	0.030
24	11.89	32.83	5.82	20	11.89	32.83	5.82	24.95	302.2	0.061
53	11.91	32.77	5.78	30	11.89	32.81	5.82	24.94	303.3	0.091
78	10.66	32.79	5.76	50	11.91	32.77	5.80	24.90	307.8	0.152
				75	10.78	32.78	5.77	25.11	287.9	0.227
139	9.18	32.75	5.74	100	9.99	32.77	5.77	25.24	276.2	0.297
244	7.54	34.07	2.84	150	8.96	32.76	5.64	25.39	261.8	0.432
352	6.06	33.98	2.17	200	8.16	33.95	4.30	26.45	162.6	0.538
455	5.22	34.07	1.25	250	7.43	34.07	2.76	26.65	144.1	0.614
560	4.93	34.31	0.86	300	6.75	34.02	2.43	26.70	139.3	0.686
769	4.10	34.31	0.41	400	5.58	34.01	1.77	26.84	126.3	0.817
980	3.54	34.43	0.44	500	5.07	34.21	0.98	27.06	106.3	0.934
1183	3.11	34.49	0.71	600	4.82	34.31	0.77	27.17	97.0	1.036
				700	4.43	34.31	0.54	27.21	93.3	1.131
				800	3.98	34.32	0.41	27.27	88.2	1.222
				1000	3.49	34.44	0.45	27.41	75.3	1.385

BLACK DOUGLAS; May 17, 1950; 0825 GCT; 40°48'N, 124°15'W; sounding, 1,560 fm; wind, 320°, force 4; weather, overcast; sea, rough; wire angle, 16°. 43.50

0	10.04	32.79	6.31	0	10.04	32.79	6.31	25.24	273.4	0.000
9	10.09	32.79	6.28	10	10.08	32.79	6.28	25.24	274.4	0.027
24	9.16	32.92	5.98	20	9.50	32.83	6.13	25.36	262.5	0.054
53	8.46	33.32	4.79	30	8.91	33.02	5.77	25.60	239.7	0.079
76	8.37	33.49	4.62	50	8.48	33.29	4.87	25.88	213.7	0.125
106	7.98	33.69	3.16	75	8.37	33.47	4.65	26.04	199.1	0.176
158	7.52	33.89	-	100	8.05	33.65	3.80	26.23	181.6	0.224
210	6.77	34.00	2.04	150	7.62	33.87	2.59	26.46	160.0	0.309
315	6.16	34.05	1.31	200	6.88	33.98	2.13	26.65	142.5	0.385
423	5.70	34.13	0.88	250	6.50	34.03	1.73	26.74	134.5	0.454
525	5.15	34.22a)	0.61	300	6.26	34.05	1.41	26.79	130.6	0.521
628	4.74	34.27a)	0.39	400	5.79	34.10	0.96	26.89	122.2	0.647
830	4.07	34.38	0.40	500	5.28	34.20	0.68	27.03	109.6	0.763
1033	3.57	34.43	0.51	600	4.82	34.25	0.45	27.12	101.4	0.868
1232	3.11	34.47	0.75	700	4.47	34.31	0.40	27.21	93.8	0.966
				800	4.15	34.36	0.40	27.28	87.2	1.056
				1000	3.63	34.43	0.48	27.39	77.8	1.221

a) Salinity samples at 525 and 628 meters appear to have been reversed; they are assumed to be in the order listed.

SIO

CCOFI
5005

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

4360 BLACK DOUGLAS; May 17, 1950; 1529 GCT; 40°28'N, 125°43'W; sounding, 1,560 fm; wind, 330°, force 3; weather, cloudy; sea, very rough; wire angle, 34°.

0	9.83	32.72	6.27	0	9.83	32.72	6.27	25.22	275.4	0.000
8	9.87	32.74	6.35	10	9.84	32.75	6.35	25.24	273.6	0.027
21	9.55	32.77	5.85	20	9.57	32.77	5.87	25.30	268.0	0.054
46	9.39	32.83	6.04	30	9.49	32.79	5.90	25.33	265.5	0.081
66	9.19	32.92	5.81	50	9.34	32.85	6.04	25.40	259.1	0.134
89	9.00	33.03	5.70	75	9.09	32.96	5.78	25.53	247.6	0.197
131	8.29	33.60	3.74	100	8.89	33.11	5.58	25.68	233.9	0.257
173	7.64	33.93	2.60	150	7.89	33.83	3.05	26.39	166.8	0.357
250	6.78	34.04	1.82	200	7.34	33.98	2.27	26.59	148.7	0.436
328	6.24	34.14	1.28	250	6.78	34.04	1.82	26.72	137.3	0.508
399	5.83	34.13	1.01	300	6.39	34.12	1.46	26.83	127.1	0.573
472	5.45	34.20	0.80	400	5.82	34.13	1.01	26.91	120.3	0.697
622	4.82	34.22	0.52	500	5.30	34.21	0.77	27.04	109.1	0.812
786	4.36	34.36	0.46	600	4.88	34.22	0.57	27.09	104.3	0.920
964	3.74	34.43	0.51	700	4.59	34.27	0.46	27.16	98.2	1.020
				800	4.32	34.37	0.47	27.27	88.5	1.114
				1000	(3.64)	(34.43)	(0.52)	(27.39)	(77.8)	(1.280)

4755 BLACK DOUGLAS; May 18, 1950; 0144 GCT; 40°04'N, 124°55'W; sounding, 680 fm; wind, 340°, force 7; weather, partly cloudy; sea, very rough; wire angle, 7°.

0	10.48	32.83	6.07	0	10.48	32.83	6.07	25.20	277.7	0.000
10	10.50	32.79	6.00	10	10.50	32.79	6.00	25.17	281.0	0.028
25	9.45	33.01	5.65	20	9.93	32.85	5.77	25.31	267.8	0.055
50	8.68	33.28	4.73	30	9.18	33.10	5.50	25.62	237.8	0.081
74	8.22	33.49	4.12	50	8.68	33.28	4.73	25.84	217.3	0.126
99	7.77	33.71	3.64	75	8.21	33.50	4.10	26.08	194.9	0.178
153	7.46	33.89	3.25	100	7.76	33.72	3.63	26.33	172.2	0.224
201	6.87	33.91	2.69	150	7.47	33.88	3.28	26.49	157.2	0.306
296	6.14	34.04	1.61	200	6.88	33.91	2.73	26.60	147.7	0.382
394	5.70	34.14	0.89	250	6.42	33.96	2.13	26.70	138.7	0.454
486	5.19	34.18	0.59	300	6.13	34.04	1.59	26.80	129.7	0.521
586	4.73	34.29	0.48	400	5.66	34.14	0.88	26.94	117.6	0.645
681	4.38	34.33	0.83r	500	5.13	34.19	0.56	27.04	108.5	0.758
782	4.20	34.36	0.43	600	4.67	34.30	0.46	27.18	95.9	0.860
880	4.03	34.40	0.40	700	4.33	34.34	0.42	27.25	89.9	0.953
				800	4.18	34.36	0.42	27.28	87.6	1.041
				1000	(3.76)	(34.42)		(27.37)	(79.9)	(1.209)

4760 BLACK DOUGLAS; May 17, 1950; 2122 GCT; 39°54'N, 125°18'W; sounding, 1,460 fm; wind, 340°, force 6; weather, partly cloudy; sea, very rough; wire angle, 25°.

0	11.46	32.65	6.27	0	11.46	32.65	6.27	24.89	307.5	0.000
9	12.49r	32.66	6.09	10	11.39	32.66	6.09	24.91	305.7	0.031
23	11.35	32.65	6.08	20	11.36	32.65	6.08	24.90	306.2	0.061
50	11.35	32.65	6.06	30	11.35	32.65	6.07	24.89	308.1	0.092
72	9.48	32.75	5.83	50	11.35	32.65	6.06	24.89	308.6	0.154
98	8.34	33.08	5.06	75	9.34	32.76	5.75	25.33	266.2	0.226
145	7.69	33.62	3.96	100	8.31	33.12	5.00	25.77	224.7	0.287
192	7.38	33.84	3.60	150	7.65	33.65	3.94	26.29	177.0	0.387
282	6.35	33.98	2.41	200	7.29	33.86	3.57	26.50	157.0	0.471
376	5.67	34.05	1.11	250	6.68	33.95	2.98	26.66	142.8	0.546
466	5.12	34.20	0.74	300	6.14	33.99	2.10	26.76	133.5	0.615
557	4.89	34.23	0.47	400	5.56	34.08	1.00	26.90	120.8	0.742
738	4.19	34.31	0.37	500	5.00	34.22	0.63	27.08	104.7	0.855
927	3.78	34.40	0.43	600	4.77	34.24	0.42	27.12	101.5	0.958
1122	3.33	34.43	0.61	700	4.37	34.29	0.37	27.20	94.1	1.056
				800	4.00	34.34	0.38	27.28	87.0	1.146
				1000	3.62	34.42	0.51	27.39	78.3	1.312

SIO

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OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
BLACK DOUGLAS; May 11, 1950; 0720 GCT; 39°30'N, 124°30'W; sounding, 1,105 fm; wind, 340°, force 6; weather, partly cloudy; sea, high; wire angle, 5°.													50.55
0	10.46	32.66	6.15		0	10.46	32.66	6.15		25.07	290.1	0.000	
10	10.30	32.70	6.13		10	10.30	32.70	6.13		25.13	284.6	0.029	
25	9.17	32.94	5.64		20	9.23	32.79	5.65		25.37	261.4	0.056	
55	9.11	33.04	5.66		30	9.16	32.97	5.64		25.53	247.1	0.081	
79	8.90	33.28	5.16		50	9.12	33.02	5.65		25.57	243.2	0.130	
109	8.36	33.58	3.48		75	8.91	33.20	5.34		25.75	226.7	0.189	
163	7.80	33.86	2.84		100	8.51	33.53	3.83		26.07	197.1	0.242	
216	7.20	33.96	2.36		150	7.92	33.81	2.94		26.37	168.7	0.334	
321	6.31	34.04	1.37		200	7.36	33.94	2.50		26.56	152.0	0.415	
431	5.61	34.11	0.91		250	6.88	33.99	2.02		26.66	142.5	0.487	
537	5.14	34.16	0.56		300	6.44	34.03	1.55		26.75	134.4	0.556	
644	4.68	34.23	0.38		400	5.78	34.09	0.99		26.88	122.8	0.685	
853	3.92	34.38	0.49		500	5.29	34.15	0.67		26.99	113.5	0.803	
1063	3.44	34.42	0.55		600	4.88	34.20	0.43		27.08	105.8	0.914	
1265	3.08	34.48	0.86		700	4.46	34.27	0.38		27.18	96.6	1.014	
					800	4.09	34.35	0.42		27.28	87.3	1.107	
					1000	3.54	34.41	0.54		27.39	78.1	1.272	
BLACK DOUGLAS; May 11, 1950; 1309 GCT; 39°20'N, 124°52'W; sounding, 1,620 fm; wind, 340°, force 7; weather, partly cloudy; sea, high; wire angle, 10°.													50.60
0	10.88	32.56	6.08		0	10.88	32.56	6.08		24.92	304.4	0.000	
10	10.91	32.57	6.09		10	10.91	32.57	6.09		24.92	304.4	0.030	
25	10.83	32.55	6.24		20	10.87	32.55	6.22		24.91	305.3	0.061	
53	10.02	32.74	6.20		30	10.82	32.56	6.24		24.93	303.9	0.091	
77	9.92	32.72	6.27		50	10.03	32.74	6.20		25.21	278.1	0.150	
106	9.73	32.77	5.96		75	9.94	32.72	6.27		25.20	278.6	0.219	
157	8.57	33.60	3.62		100	9.77	32.75	6.10		25.26	274.1	0.288	
208	7.86	33.86	2.69		150	8.90	33.50	4.00		25.98	206.1	0.408	
309	6.83	34.07	1.70		200	7.93	33.83	2.77		26.39	168.2	0.502	
414	6.08	34.05	1.32		250	7.50	34.00	2.22		26.58	150.3	0.581	
514	5.55	34.14	0.94		300	6.89	34.06	1.77		26.72	138.2	0.654	
615	5.09	34.20	0.50		400	6.14	34.05	1.35		26.81	130.4	0.788	
812	4.12	34.32	0.35		500	5.64	34.12	1.01		26.92	120.0	0.913	
1015	3.58	34.42	0.45		600	5.16	34.20	0.55		27.04	109.3	1.028	
1214	3.10	34.45	0.67		700	4.66	34.23	0.37		27.13	102.0	1.134	
					800	4.18	34.31	0.35		27.24	91.3	1.230	
					1000	3.63	34.41	0.43		27.38	79.1	1.401	
BLACK DOUGLAS; May 11, 1950; 2030 GCT; 39°00'N, 125°36.5'W; sounding, 2,105 fm; wind, 340°, force 7; weather, cloudy; sea, high; wire angle, 20°.													50.70
0	11.71	32.74	6.17		0	11.71	32.74	6.17		24.91	305.4	0.000	
9	11.71	32.77	6.22		10	11.70	32.77	6.22		24.94	303.0	0.030	
23	11.63	32.79	6.24		20	11.64	32.79	6.23		24.96	300.7	0.060	
51	11.42	32.74	6.29		30	11.56	32.79	6.27		24.98	299.5	0.091	
74	9.43	32.92	5.72		50	11.43	32.74	6.29		24.96	301.4	0.151	
102	8.55	33.13	4.97		75	9.37	32.93	5.70		25.46	254.1	0.220	
152	8.37	33.69	3.33		100	8.58	33.12	5.03		25.73	228.6	0.280	
200	7.72	33.87	2.58		150	8.39	33.68	3.39		26.20	185.1	0.384	
295	6.76	34.05	1.69		200	7.72	33.87	2.58		26.45	162.2	0.471	
394	6.08	34.11	1.00		250	7.13	33.99	2.07		26.63	145.9	0.548	
489	5.03	34.11	0.80		300	6.72	34.05	1.64		26.73	136.5	0.618	
587	4.73	34.15	0.49		400	6.00	34.11	0.98		26.87	124.1	0.749	
783	4.01	34.34	0.35		500	5.00	34.11	0.77		26.99	112.9	0.867	
988	3.54	34.40	0.50		600	4.69	34.16	0.47		27.07	107.1	0.977	
1192	3.14	34.49	0.64		700	4.31	34.26	0.36		27.19	95.6	1.078	
					800	3.97	34.34	0.35		27.29	86.6	1.169	
					1000	3.51	34.40	0.51		27.38	78.5	1.334	

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5005

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

5080 BLACK DOUGLAS; May 12, 1950; 0259 GCT; 38°40'N, 126°21'W; sounding, 2,380 fm; wind, 340°, force 5; weather, overcast; sea, high; wire angle, 3°.

0	11.90	32.79	6.18	0	11.90	32.79	6.18	24.92	304.5	0.000
10	11.94	32.81	6.16	10	11.94	32.81	6.16	24.92	304.3	0.030
25	11.82	32.78	6.09	20	11.86	32.78	6.09	24.91	305.3	0.061
55	11.89	32.78	6.19	30	11.82	32.78	6.09	24.92	304.8	0.091
80	9.93	32.81	6.06	50	11.88	32.78	6.18	24.91	306.3	0.152
108	8.67	32.90	5.46	75	10.11	32.80	6.10	25.24	275.4	0.225
162	7.90	33.49	4.21	100	9.21	32.87	5.65	25.44	256.6	0.292
213	7.79	33.86	2.95	150	7.97	33.21	4.50	25.90	213.9	0.410
313	6.63	33.98	2.26	200	7.79	33.80	3.20	26.38	168.4	0.505
419	5.86	34.07	1.14	250	7.44	33.94	2.58	26.54	153.9	0.585
520	5.06	34.10	0.77	300	6.73	33.98	2.31	26.68	141.8	0.660
622	4.75	34.20	0.44	400	5.94	34.05	1.30	26.83	127.8	0.794
825	4.00	34.33	0.35	500	5.19	34.10	0.84	26.96	115.9	0.916
1032	3.56	34.40	0.45	600	4.81	34.17	0.50	27.06	107.2	1.028
1233	3.06	34.47	0.72	700	4.48	34.27	0.35	27.18	96.9	1.130
				800	4.11	34.32	0.35	27.26	89.7	1.223
				1000	3.63	34.39	0.42	27.36	80.6	1.393

5090 BLACK DOUGLAS; May 12, 1950; 1024, 0935 GCT; 38°20'N, 127°05'W; sounding, 2,460 fm; wind, 340°, force 5; weather, drizzle; sea, very rough; wire angle, 10°, 25°.

0	12.32	32.94	5.79	0	12.32	32.94	5.79	24.95	301.5	0.000
10	12.35	32.84	5.85	10	12.35	32.84	5.85	24.87	309.3	0.030
25	12.26	32.85	6.06	20	12.28	32.84	6.02	24.88	308.4	0.061
49	12.33	32.86	5.97	30	12.26	32.86	6.06	24.90	306.8	0.092
74	12.13	32.84	5.79	50	12.32	32.86	5.96	24.89	308.4	0.154
98	10.14	32.99	5.29	75	12.12	32.84	5.78	24.91	306.8	0.231
147	9.35	33.60	3.38	100	10.12	33.00	5.27	25.39	261.3	0.302
				150	9.28	33.63	3.30	26.02	202.3	0.418
170	8.93	33.76	2.88	200	8.47	33.84	2.52	26.31	175.3	0.512
272	7.65	33.96	2.05	250	7.91	33.93	2.16	26.47	161.3	0.596
370	6.58	34.11	1.27	300	7.34	34.00	1.84	26.61	148.8	0.674
468	5.71	34.08	0.87	400	6.27	34.10	1.12	26.83	128.4	0.812
663	4.67	34.25	0.41	500	5.49	34.09	0.76	26.92	120.4	0.936
864	4.11	34.38	0.40	600	4.95	34.19	0.52	27.06	107.4	1.050
1064	3.63	34.42	0.58	700	4.56	34.28	0.40	27.18	97.1	1.152
				800	4.26	34.35	0.40	27.26	89.3	1.246
				1000	3.77	34.41	0.50	27.36	80.8	1.416

50100 BLACK DOUGLAS; May 12, 1950; 1636 GCT; 38°00'N, 127°45'W; sounding, 2,500 fm; wind, 340°, force 4; weather, overcast; sea, very rough; wire angle, 10°.

0	12.29	32.90	6.09	0	12.29	32.90	6.09	24.93	303.7	0.000
10	12.32	32.88	6.06	10	12.32	32.88	6.06	24.90	306.0	0.030
24	12.21	32.88	6.10	20	12.23	32.88	6.08	24.92	304.6	0.061
53	12.01	32.90	6.02	30	12.18	32.88	6.09	24.93	303.9	0.091
78	9.56	33.09	5.23	50	12.03	32.89	6.04	24.97	300.9	0.152
108	9.11	33.51	3.86	75	9.67	33.06	5.35	25.51	249.2	0.221
162	8.47	33.82	2.86	100	9.22	33.43	4.12	25.88	215.2	0.279
216	7.75	33.98	2.26	150	8.63	33.77	3.03	26.23	182.0	0.378
323	6.68	34.05	1.63	200	7.95	33.94	2.42	26.47	160.3	0.463
434	5.72	34.14	0.86	250	7.42	34.02	2.04	26.61	147.7	0.541
540	5.27	34.22	0.55	300	6.88	34.05	1.76	26.71	138.6	0.612
646	4.85	34.29	0.43	400	5.94	34.10	1.06	26.87	124.1	0.743
853	4.12	34.42	0.36	500	5.43	34.20	0.62	27.01	111.5	0.861
1061	3.51	34.47	0.54	600	5.05	34.26	0.47	27.10	103.5	0.969
1262	3.10	34.52	0.69	700	4.63	34.33	0.40	27.21	94.2	1.067
				800	4.28	34.39	0.37	27.29	86.5	1.158
				1000	3.68	34.46	0.46	27.41	76.0	1.320

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

BLACK DOUGLAS; May 12, 1950; 2327 GCT; 37°40'N, 128°33'W; sounding, 2,610 fm; wind, 340°, force 6; weather, overcast; sea, high; wire angle, 22°. 50.110

0	12.13	32.75	6.19	0	12.13	32.75	6.19	24.84	311.7	0.000
9	12.15	32.79	6.19	10	12.14	32.80	6.19	24.88	308.4	0.031
23	12.05	32.81	6.13	20	12.07	32.81	6.14	24.90	306.8	0.062
51	11.90	32.81	6.09	30	12.02	32.81	6.12	24.91	306.2	0.092
74	10.10	33.10	5.45	50	11.91	32.81	6.09	24.93	304.3	0.153
101	9.76	33.37	4.52	75	10.09	33.14	5.37	25.51	249.9	0.223
148	8.87	33.78	2.95	100	9.73	33.36	4.60	25.73	229.2	0.283
196	8.18	34.00	2.31	150	8.82	33.80	2.91	26.23	182.7	0.386
289	6.98	34.00	1.95	200	8.15	34.00	2.28	26.49	158.8	0.471
387	5.96	34.07	1.27	250	7.52	34.00	2.07	26.58	150.6	0.549
481	5.31	34.11	0.77	300	6.79	34.00	1.90	26.68	141.3	0.621
576	4.91	34.20	0.34	400	5.87	34.08	1.19	26.86	124.7	0.754
764	4.20	34.34	0.49	500	5.23	34.12	0.68	26.95	116.8	0.875
956	3.65	34.47	0.54	600	4.83	34.22	0.34	27.10	103.8	0.985
1146	3.19	34.52	0.71	700	4.42	34.30	0.40	27.21	93.9	1.084
				800	4.09	34.36	0.51	27.29	86.5	1.174
				1000	3.54	34.49	0.55	27.45	72.2	1.333

BLACK DOUGLAS; May 13, 1950; 0608 GCT; 37°20'N, 129°16.5'W; sounding, 2,600 fm; wind, 350°, force 6; weather, overcast; sea, high; wire angle, 7°. 50.120

0	11.80	32.72	6.32	0	11.80	32.72	6.32	24.88	308.4	0.000
10	11.82	32.72	6.18	10	11.82	32.72	6.18	24.87	308.8	0.031
25	11.70	32.72	6.23	20	11.74	32.72	6.20	24.89	307.6	0.062
54	10.96	32.68	6.24	30	11.61	32.72	6.23	24.91	305.6	0.092
79	9.96	32.68	6.02	50	11.07	32.68	6.24	24.98	299.6	0.153
108	9.16	32.79	5.82	75	10.11	32.68	6.06	25.15	284.3	0.226
131	7.93	33.37	4.91	100	9.33	32.73	5.87	25.31	268.8	0.295
214	7.61	33.87	3.14	150	8.08	33.16	5.17	25.84	219.2	0.417
318	6.41	34.04	2.01	200	7.68	33.84	3.55	26.43	163.9	0.513
427	5.48	34.04	1.10	250	7.28	33.99	2.62	26.61	147.9	0.590
531	4.91	34.16	0.67	300	6.62	34.03	2.17	26.73	136.5	0.662
635	4.49	34.18	0.44	400	5.63	34.04	1.31	26.86	124.6	0.793
839	3.94	34.40	0.35	500	5.08	34.13	0.76	27.00	112.4	0.911
1045	3.37	34.42	0.56	600	4.62	34.17	0.50	27.08	105.0	1.020
1244	2.99	34.52	0.86	700	4.27	34.23	0.37	27.17	97.4	1.121
				800	4.01	34.36	0.35	27.30	85.6	1.212
				1000	3.51	34.42	0.50	27.40	77.0	1.375

BLACK DOUGLAS; May 13, 1950; 1253 GCT; 37°00'N, 130°00'W; sounding, 2,700 fm; wind, 340°, force 5; weather, overcast; sea, high; wire angle, 20°. 50.130

0	13.54	32.90	6.05	0	13.54	32.90	6.05	24.68	327.1	0.000
9	13.55	32.92	5.91	10	13.53	32.92	5.90	24.70	325.7	0.033
23	13.46	32.92	5.77	20	13.47	32.92	5.78	24.71	324.8	0.065
51	12.13	32.84	6.19	30	13.44	32.91	5.81	24.71	325.2	0.098
74	11.63	32.84	5.97	50	12.25	32.84	6.18	24.89	308.6	0.161
102	10.73	32.97	5.60	75	11.59	32.84	5.95	25.01	297.4	0.237
151	8.75	33.17	5.17	100	10.84	32.95	5.62	25.23	276.9	0.308
200	7.97	33.68	3.84	150	8.77	33.17	5.18	25.74	228.6	0.434
296	6.82	33.98	2.64	200	7.97	33.68	3.84	26.26	179.7	0.537
397	5.78	34.02	1.82	250	7.35	33.93	3.06	26.55	153.4	0.620
493	4.82	34.02	1.43	300	6.79	33.98	2.60	26.67	142.8	0.695
589	4.38	34.16	0.90	400	5.75	34.02	1.81	26.83	127.6	0.829
781	3.86	34.31	0.49	500	4.78	34.02	1.39	26.95	117.0	0.951
978	3.49	34.40	0.43	600	4.34	34.17	0.87	27.11	101.7	1.062
1173	3.16	34.47	0.69	700	4.04	34.27	0.60	27.22	91.7	1.157
				800	3.82	34.31	0.47	27.28	87.1	1.248
				1000	3.43	34.41	0.46	27.40	76.8	1.411

SIO

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5005

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
5560	BLACK DOUGLAS; May 10, 1950; 1255 GCT; 38°28.5'N, 124°14'W; sounding, 1,970 fm; wind, 320°, force 5; weather, clear; sea, very rough; wire angle, 25°.											
0	9.96	32.94	4.45r		0	9.96	32.94	(5.89)		25.37	261.3	0.000
9	9.98	32.94	5.87		10	9.98	32.94	5.87		25.37	261.5	0.026
22	9.63	33.08	5.77		20	9.67	32.99	5.78		25.46	253.3	0.052
49	9.06	33.19	5.36		30	9.49	33.13	5.68		25.60	240.3	0.077
72	8.45	33.26	4.66		50	9.04	33.19	5.35		25.72	229.4	0.124
99	8.98	33.62	3.79		75	8.44	33.27	4.50		25.87	215.0	0.179
147	8.03	33.77	3.57		100	8.97	33.63	3.78		26.07	196.6	0.231
194	7.60	33.93	2.72		150	8.00	33.79	3.55		26.35	171.3	0.322
285	6.81	33.78u	2.42		200	7.57	(33.94)	2.68		(26.53)	(154.9)	(0.404)
376	6.00	34.09	1.16		250	7.15	(34.00)	2.54		(26.63)	(145.4)	(0.479)
463	5.26	34.13	0.89		300	6.67	(34.04)	2.30		(26.73)	(136.4)	(0.550)
553	4.94	34.18	0.66		400	5.77	34.10	1.06		26.89	121.9	(0.678)
740	4.42	34.34	0.30		500	5.08	34.14	0.80		27.01	111.6	(0.796)
940	3.94	34.40	0.46		600	4.82	34.22	0.53		27.10	103.6	(0.904)
1140	3.37	34.47	0.66		700	4.54	34.31	0.34		27.20	94.6	(1.003)
					800	4.27	34.37	0.31		27.28	87.9	(1.094)
					1000	3.77	34.42	0.53		27.37	80.0	(1.262)
6060	BLACK DOUGLAS; May 9, 1950; 0440 GCT; 37°37'N, 123°37'W; sounding, 1,840 fm; wind, 340°, force 6; weather, clear; sea, high; wire angle, 8°.											
0	10.13	33.22	5.68		0	10.13	33.22	5.68		25.56	243.2	0.000
10	10.18	33.25	5.62		10	10.18	33.25	5.62		25.58	242.1	0.024
25	10.01	33.24	5.72		20	10.06	33.24	5.70		25.59	241.0	0.048
54	8.74	33.48	4.64		30	10.02	33.24	5.68		25.60	240.5	0.073
79	8.32	33.69	3.09		50	8.82	33.43	4.93		25.94	208.3	0.117
108	8.22	33.82	3.20r		75	8.35	33.66	3.25		26.19	184.7	0.166
162	7.98	34.00	1.85		100	8.26	33.78	2.56		26.30	174.9	0.211
216	7.25	34.00	1.77		150	8.05	33.99	1.92		26.49	157.2	0.294
320	6.25	34.06	1.24		200	7.50	34.00	1.77		26.58	149.5	0.371
428	5.60	34.14	0.70		250	6.86	34.01	1.68		26.68	140.8	0.443
531	5.02	34.22	0.45		300	6.37	34.04	1.38		26.77	132.8	0.512
636	4.85	34.31	0.35		400	5.74	34.12	0.80		26.91	120.1	0.639
843	4.12	34.38	0.43		500	5.20	34.19	0.50		27.03	109.4	0.753
1053	3.64	34.47	0.63		600	4.89	34.28	0.36		27.14	100.0	0.858
1257	3.16	34.47	0.77		700	4.69	34.33	0.35		27.20	94.9	0.956
					800	4.29	34.36	0.39		27.27	88.9	1.047
					1000	3.72	34.46	0.59		27.41	76.5	1.213
6070	BLACK DOUGLAS; May 8, 1950; 2031 GCT; 37°17'N, 124°21'W; sounding, 2,230 fm; wind, 340°, force 6; weather, cloudy; sea, high; wire angle, 22°.											
0	10.56	32.83	6.44		0	10.56	32.83	6.44		25.19	279.0	0.000
9	10.53	32.84	6.39		10	10.52	32.84	6.38		25.20	277.8	0.028
23	10.20	32.86	6.28		20	10.37	32.86	6.29		25.24	274.1	0.055
51	10.06	32.99	6.06		30	10.14	32.88	6.21		25.30	269.1	0.083
74	10.04	33.01	6.06		50	10.06	32.99	6.07		25.40	260.1	0.136
101	9.17	33.26	5.32		75	10.03	33.01	6.06		25.42	258.6	0.200
150	8.49	33.51	4.15		100	9.27	33.25	5.36		25.73	229.3	0.261
198	7.70	33.82	3.68		150	8.49	33.51	4.15		26.05	199.1	0.369
288	7.18	34.08	1.84		200	7.67	33.84	3.65		26.43	163.7	0.459
376	6.31	34.14	1.22		250	7.39	34.02	2.50		26.61	147.3	0.537
462	5.65	34.18	0.75		300	7.09	34.09	1.71		26.71	138.7	0.608
551	5.22	34.25	0.48		400	6.12	34.15	1.08		26.89	122.7	0.739
733	4.52	34.34	0.26		500	5.46	34.21	0.60		27.02	111.1	0.856
926	4.03	34.43	0.48		600	5.00	34.28	0.37		27.13	101.4	0.962
1120	3.47	34.47	0.68		700	4.63	34.33	0.27		27.21	94.2	1.060
					800	4.32	34.37	0.30		27.27	88.5	1.151
					1000	3.82	34.45	0.57		27.39	78.4	1.319

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

BLACK DOUGLAS; May 8, 1950; 1049 GCT; 36°57'N, 125°04'W; sounding, 2,400 fm; wind, 350°, force 7; weather, partly cloudy; sea, high; wire angle, 7°. 60.80

0	10.90	32.83	6.16	0	10.90	32.83	6.16	25.13	284.6	0.000
10	10.92	32.83	6.08	10	10.92	32.83	6.08	25.12	285.2	0.028
25	10.86	32.77	6.09	20	10.89	32.78	6.08	25.09	288.6	0.057
55	10.91	32.84	6.05	30	10.86	32.77	6.08	25.09	289.0	0.086
79	10.47	32.95	5.87	50	10.92	32.82	6.05	25.12	286.8	0.144
108	9.51	33.17	5.18	75	10.49	32.93	5.89	25.28	272.0	0.213
162	8.45	33.71	3.29	100	9.97	33.11	5.43	25.50	250.7	0.279
216	8.07	33.97	2.08	150	8.63	33.62	3.70	26.12	193.1	0.390
321	6.64	33.99	2.19	200	8.17	33.95	2.18	26.45	162.9	0.479
431	5.68	34.07	1.30	250	7.66	33.98	2.11	26.54	154.1	0.558
536	5.23	34.21	0.62	300	6.89	33.99	2.18	26.66	143.3	0.632
643	4.81	34.29	0.38	400	5.91	34.04	1.58	26.83	128.2	0.768
852	4.09	34.49r	0.34	500	5.36	34.17	0.82	27.00	112.8	0.889
858p	4.17r	34.40	0.37u	600	4.99	34.26	0.44	27.11	102.7	0.996
				700	4.61	34.32	0.34	27.20	94.7	1.095
				800	4.26	34.37	0.34	27.28	87.8	1.186
				1000	(3.66)	(34.45)		(27.40)	(76.5)	(1.350)

BLACK DOUGLAS; May 8, 1950; 0103 GCT; 36°37'N; 125°47'W; sounding, 2,480 fm; wind, 350°, force 7; weather, cloudy; sea, high; wire angle, 26°. 60.90

0	12.97	33.03	5.92	0	12.97	33.03	5.92	24.90	306.5	0.000
9	13.00	33.03	5.97	10	12.99	33.03	5.97	24.89	307.3	0.031
22	12.91	33.08	5.97	20	12.92	33.08	5.97	24.94	302.6	0.061
49	12.97	33.06	5.83	30	12.92	33.08	5.92	24.94	302.8	0.091
72	12.93	33.06	5.74	50	12.96	33.06	5.82	24.92	305.3	0.152
98	9.68	33.42	4.42	75	12.92	33.06	5.70	24.93	305.4	0.229
146	8.33	33.84	2.84	100	9.49	33.46	4.31	25.86	217.2	0.294
193	7.88	33.96	2.39	150	8.27	33.87	2.79	26.37	169.3	0.391
286	6.49	33.96	2.40	200	7.82	33.96	2.38	26.51	157.0	0.472
381	5.86	34.07	1.42	250	7.14	33.96	2.37	26.60	148.2	0.549
471	5.37	34.14	0.89	300	6.32	33.96	2.35	26.71	137.8	0.620
561	4.96	34.25	0.62	400	5.77	34.09	1.22	26.88	122.7	0.750
739	4.35	34.36	0.54	500	5.22	34.17	0.80	27.01	111.1	0.867
925	3.83	34.45	0.44	600	4.81	34.28	0.57	27.15	99.1	0.972
1114	3.38	34.52	0.71	700	4.47	34.35	0.54	27.24	90.8	1.067
				800	4.17	34.39	0.52	27.31	85.2	1.155
				1000	3.64	34.48	0.50	27.43	74.1	1.315

BLACK DOUGLAS; May 7, 1950; 1738 GCT; 36°18'N, 126°30'W; sounding, 2,530 fm; wind, 350°, force 7; weather, overcast; sea, high; wire angle, 9°. 60.100

0	12.41	32.88	5.77	0	12.41	32.88	5.77	24.88	307.7	0.000
10	12.37	32.89	5.62	10	12.37	32.89	5.62	24.90	306.3	0.031
25	12.31	32.89	5.73	20	12.34	32.89	5.66	24.91	305.8	0.061
54	10.85	32.70	6.15	30	12.22	32.88	5.80	24.92	304.6	0.092
79	10.03	32.90	5.63	50	10.86	32.70	6.10	25.03	294.6	0.152
108	8.42	33.12	4.94	75	10.24	32.87	5.75	25.27	272.3	0.223
163	8.20	33.71	3.39	100	8.51	33.04	5.10	25.68	233.5	0.286
217	7.76	33.96	2.35	150	8.26	33.61	3.73	26.17	188.4	0.392
324	6.47	34.08	1.52	200	7.93	33.90	2.65	26.44	163.0	0.479
434	5.59	34.11	0.84	250	7.47	34.03	1.99	26.61	147.6	0.557
541	5.20	34.20	0.54	300	6.75	34.08	1.65	26.75	134.7	0.627
647	4.75	34.26	0.37	400	5.73	34.10	1.04	26.90	121.4	0.755
854	4.01	33.93r	1.85r	500	5.33	34.16	0.60	26.99	113.2	0.873
1067	3.52	34.45	0.58	600	4.97	34.24	0.43	27.10	104.0	0.981
1270	3.09	34.48	0.79	700	4.51	(34.29)	0.37	(27.19)	(95.7)	(1.089)
				800	4.17	(34.34)	0.44	(27.27)	(88.9)	(1.173)
				1000	3.65	(34.43)	0.57	(27.39)	(77.9)	(1.340)

60.110 BLACK DOUGLAS; May 7, 1950; 0621 GCT; 35°57'N, 127°12'W; sounding, 2,620 fm; wind, 010°, force 5; weather, cloudy; sea, very rough; wire angle, 32°.

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
0	13.41	32.93	5.66		0	13.41	32.93	5.66		24.73	322.6	0.000
8	13.38	32.94	5.87		10	13.37	32.94	5.87		24.75	321.1	0.032
26	13.32	32.95	5.93		20	13.34	32.95	5.92		24.76	320.1	0.064
51	13.39	32.92	5.72		30	13.33	32.95	5.92		24.76	320.1	0.096
76	11.99	32.81	6.04		50	13.39	32.92	5.73		24.73	324.0	0.161
101	10.48	32.84	5.63		75	12.20	32.81	6.03		24.87	310.4	0.240
150	8.70	33.31	4.80		100	10.56	32.84	5.67		25.19	280.3	0.314
197	7.94	33.75	4.26		150	8.70	33.31	4.80		25.86	217.1	0.439
292	6.75	33.98	3.08		200	7.91	33.76	4.23		26.34	173.1	0.536
383	5.64	33.98	2.03		250	7.33	33.94	3.61		26.56	152.3	0.617
477	4.88	34.05	1.29		300	6.64	33.98	2.98		26.69	140.5	0.691
569	4.67	34.16	0.68		400	5.48	33.99	1.86		26.84	126.5	0.823
824p	4.15	34.36	0.39		500	4.79	34.07	1.13		26.98	113.4	0.943
1025p	3.53	34.47	0.57		600	(4.59)	(34.20)	(0.59)		(27.11)	(102.1)	(1.052)
					700	(4.41)	(34.29)	(0.45)		(27.20)	(94.8)	(1.149)
					800	(4.22)	(34.35)	(0.39)		(27.27)	(88.8)	(1.242)
					1000	3.61	34.45	0.53		27.41	75.9	(1.407)

60.120 BLACK DOUGLAS; May 6, 1950; 2148 GCT; 35°37'N, 127°54.5'W; sounding, 2,610 fm; wind, 020°, force 6; weather, overcast; sea, very rough; wire angle, 25°.

0	13.02	32.81	5.85		0	13.02	32.81	5.85		24.72	323.6	0.000
9	13.01	32.77	5.87		10	12.99	32.77	5.88		24.69	326.2	0.032
23	12.94	32.81	5.81		20	12.95	32.81	5.82		24.73	322.8	0.065
50	12.88	32.81	5.74		30	12.92	32.81	5.80		24.73	322.6	0.097
73	11.38	32.74	6.10		50	12.88	32.81	5.74		24.74	322.2	0.162
100	9.66	32.70	5.65		75	11.29	32.74	6.10		24.99	299.5	0.239
149	8.51	33.21	4.80		100	9.66	32.70	5.65		25.23	276.4	0.311
197	7.85	34.71	3.66		150	8.48	33.24	4.77		25.84	219.1	0.436
289	6.66	34.95	3.13		200	7.82	33.73	3.64		26.32	174.0	0.534
386	5.68	34.98	1.92		250	7.22	33.91	3.29		26.55	153.1	0.615
478	5.11	34.09	1.02		300	6.49	33.96	3.05		26.69	140.1	0.689
571	4.56	34.14	0.73		400	5.59	33.99	1.73		26.83	127.9	0.822
756	4.02	34.31	0.33		500	4.98	34.10	0.93		26.99	113.4	0.943
951	3.66	34.40	0.42		600	4.46	34.17	0.65		27.10	103.1	1.052
1150	3.25	34.45	0.65		700	4.14	34.26	0.44		27.21	93.6	1.149
					800	3.93	34.34	0.33		27.29	86.1	1.240
					1000	3.58	34.41	0.48		27.38	78.5	1.404

60.130 BLACK DOUGLAS; May 6, 1950; 1236 GCT; 35°17'N, 128°37'W; sounding, 2,580 fm; wind, 340°, force 4; weather, overcast; sea, very rough; wire angle, 28°.

0	13.16	32.81	5.79		0	13.16	32.81	5.79		24.69	326.6	0.000
9	13.15	32.81	5.80		10	13.15	32.81	5.81		24.69	326.5	0.033
23	12.75	32.81	5.95		20	12.82	32.81	5.95		24.75	320.5	0.065
49	12.73	32.81	5.76		30	12.72	32.81	5.94		24.77	318.9	0.097
71	12.21	32.74	5.76		50	12.71	32.81	5.76		24.78	319.2	0.161
97	11.09	32.74	5.80		75	12.12	32.74	5.77		24.83	314.1	0.240
143	9.26	32.90	5.44		100	10.78	32.74	5.79		25.08	291.4	0.316
187	8.88	33.48	4.73		150	9.19	32.96	5.22		25.51	250.5	0.451
275	7.83	33.95	4.26		200	8.77	33.68	4.64		26.14	191.7	0.562
368	6.36	33.98	2.67		250	8.12	33.93	4.36		26.44	164.4	0.651
456	5.72	34.05	1.44		300	7.41	33.96	4.04		26.57	152.5	0.729
546	5.05	34.11	0.91		400	6.07	34.00	1.96		26.78	133.2	0.872
721	4.21	34.25	0.74		500	5.40	34.08	1.18		26.92	120.0	0.999
906	3.78	34.36	0.13u		600	4.71	34.15	0.78		27.06	107.5	1.113
1094	3.35	34.43	0.66		700	4.28	34.23	0.74		27.17	97.5	1.215
					800	4.00	34.31	0.75		27.26	89.2	1.309
					1000	3.57	34.40	0.72		27.37	79.2	1.477

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

BLACK DOUGLAS; May 9, 1950; 1052 GCT; 37°37'N, 123°07.5'W; sounding, 580 fm; wind, 330°, force 4; weather, clear; sea, rough; wire angle, 32°. 61.55

0	9.68	33.33	5.50	0	9.68	33.33	5.50	25.72	227.9	0.000
8	9.54	33.36	5.36	10	9.52	33.37	5.26	25.78	222.6	0.023
25	8.96	33.58	5.01	20	8.99	33.45	5.05	25.93	208.8	0.044
41	8.91	33.67	5.19	30	8.95	33.61	5.05	26.06	196.5	0.064
62	8.67	33.80	4.99	50	8.84	33.72	5.12	26.16	187.1	0.103
82	8.64	33.80	4.94	75	8.64	33.80	4.93	26.26	178.6	0.148
124	8.49	33.98	2.28	100	8.58	33.83	3.00	26.29	175.9	0.193
162	7.98	34.06	1.97	150	8.23	34.04	2.04	26.51	156.1	0.275
234	7.22a)	34.07	1.76	200	7.55	34.07	1.84	26.63	144.7	0.351
305	6.78	34.14	1.15	250	7.08	34.08	1.68	26.71	138.2	0.421
378	6.36	34.22	0.72	300	6.82	34.13	1.19	26.78	132.0	0.489
459	5.91	34.22	0.48	400	6.24	34.22	0.64	26.93	119.1	0.615
542	5.64	34.22	0.50	500	5.75	34.22	0.48	26.99	114.0	0.731
634	5.23	34.29	0.44	600	5.37	34.27	0.45	27.08	106.7	0.842
726	4.84	34.22r	0.50	700	4.94	(34.33)	0.48	(27.17)	(98.0)	(0.944)

BLACK DOUGLAS; May 3, 1950; 0437 GCT; 36°45'N, 123°00'W; sounding, 1,645 fm; wind, 270°, force 3; weather, partly cloudy; sea, very rough; wire angle, 19°. 65.60

0	10.67	33.42	5.61	0	10.67	33.42	5.61	25.62	237.2	0.000
10	10.70	33.42	5.72	10	10.70	33.42	5.72	25.62	237.9	0.024
24	10.11	33.46	5.61	20	10.57	33.45	5.66	25.67	233.8	0.047
52	9.00	33.62	3.60	30	9.61	33.49	5.45	25.86	215.5	0.070
76	8.71	33.82	2.81	50	9.03	33.61	3.75	26.05	198.1	0.111
104	8.49	33.93	2.52	75	8.72	33.81	2.83	26.25	179.0	0.158
156	8.19	34.05	1.90	100	8.52	33.92	2.55	26.37	168.4	0.202
208	7.40	34.10	1.76	150	8.23	34.04	1.93	26.51	156.1	0.282
312	6.54	34.19	0.98	200	7.51	34.09	1.78	26.65	142.9	0.358
359p	6.18	34.20	0.79	250	7.02	34.14	1.53	26.76	133.3	0.426
421	5.86	34.22	0.68	300	6.62	34.18	1.07	26.85	125.7	0.491
525	5.48	34.23	0.62	400	5.94	34.21	0.72	26.96	115.9	0.612
628	4.92	34.34	0.56	500	5.56	34.22	0.63	27.01	111.7	0.726
769p	4.44	34.42	0.48	600	5.04	34.31	0.58	27.15	99.6	0.832
				700	4.64	34.38	0.52	27.25	90.6	0.927

BLACK DOUGLAS; May 3, 1950; 1415 GCT; 36°03'N, 122°02'W; sounding, 780 fm; wind, 270°, force 3; weather, partly cloudy; sea, very rough; wire angle, 19°. 70.55

0	11.87	33.33	6.03	0	11.87	33.33	6.03	25.34	264.5	0.000
10	11.83	33.33	6.00	10	11.83	33.33	6.00	25.34	264.2	0.026
24	11.79	33.31	5.94	20	11.79	33.32	5.95	25.35	264.3	0.053
47	11.71	33.31	5.96	30	11.77	33.31	5.92	25.34	264.9	0.079
70	9.72	33.42	4.55	50	11.69	33.31	5.94	25.36	263.9	0.132
92	9.29	33.53	3.95	75	9.60	33.45	4.37	25.83	219.2	0.193
140	8.89	33.80	2.96	100	9.22	33.58	3.76	25.99	204.1	0.246
180	8.13	33.96	2.51	150	8.73	33.87	2.84	26.30	176.1	0.340
254	7.20	33.96	1.88	200	7.87	33.96	2.34	26.50	157.7	0.425
326	6.34	34.07	1.45	250	7.24	33.96	1.91	26.59	149.6	0.501
398	5.92	34.14	0.97	300	6.64	34.02	1.58	26.72	137.8	0.572
472	5.60	34.23	0.57	400	5.91	34.14	0.94	26.91	120.7	0.702
631	4.86	34.32	0.38	500	5.47	34.26	0.49	27.06	107.5	0.816
792	4.54	34.41	0.38	600	4.99	34.31	0.38	27.15	99.0	0.920
968	4.06	34.47	0.51	700	4.68	34.36	0.38	27.23	92.6	1.015
				800	4.53	34.41	0.38	27.28	88.1	1.106
				1000	(3.94)	(34.47)	(0.56)	(27.39)	(78.4)	(1.272)

a) Alternate value, 7.12°C, not used in interpolation.

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

70.60 BLACK DOUGLAS; May 3, 1950; 1856 GCT; 35°53'N, 122°23'W; sounding, 1,730 fm; wind, 290°, force 1; weather, partly cloudy; sea, rough; wire angle, 2°.

0	12.42	33.13	6.17	0	12.42	33.13	6.17	25.08	289.2	0.000
10	12.16	33.13	6.20	10	12.16	33.13	6.20	25.13	284.7	0.029
25	11.72	33.22	6.21	20	11.81	33.19	6.21	25.24	274.2	0.057
50	10.84	33.33	5.53	30	11.45	33.24	6.20	25.35	264.4	0.084
75	9.37	33.49	3.91	50	10.84	33.33	5.53	25.53	247.8	0.135
100	8.67	33.63	3.76	75	9.37	33.49	3.91	25.90	212.8	0.192
155	8.23	33.96	2.33	100	8.67	33.63	3.76	26.12	192.1	0.243
204	7.62	34.05	1.98	150	8.27	33.94	2.38	26.42	164.1	0.332
303	6.76	34.14	1.26	200	7.64	34.04	1.99	26.59	148.5	0.411
406	5.92	34.16	0.83	250	7.20	34.10	1.66	26.70	138.7	0.482
504	5.52	34.23	0.55	300	6.79	34.14	1.28	26.79	130.9	0.550
606	4.98	34.29	0.65u	400	5.97	34.16	0.85	26.91	120.0	0.674
804	4.20	34.40	0.46	500	5.53	34.23	0.55	27.02	110.5	0.790
998	3.74	34.47	0.78	600	4.99	34.29	(0.50)	27.14	100.5	0.896
1200	3.24	34.52	0.89	700	4.55	34.34	(0.49)	27.22	92.5	0.992
				800	4.22	34.40	(0.46)	27.31	85.1	1.081
				1000	3.72	34.47	0.78	27.42	75.7	1.242

70.70 BLACK DOUGLAS; May 4, 1950; 0133 GCT; 35°33'N, 123°06'W; sounding, 2,080 fm; wind, 320°, force 3; weather, cloudy; sea, very rough; wire angle, 23°.

0	11.68	33.26	6.82	0	11.68	33.26	6.82	25.32	266.3	0.000
9	11.52	33.26	6.40	10	11.52	33.26	6.35	25.35	263.7	0.026
23	10.79	33.26	5.74	20	10.84	33.26	5.78	25.47	252.3	0.052
46	10.76	33.28a)	5.50	30	10.78	33.26	5.65	25.48	251.5	0.077
69	9.43	33.46a)	3.99	50	10.76	33.32	5.45	25.53	247.2	0.127
92	8.88	33.62a)	3.26	75	9.20	33.50	3.72	25.93	209.3	0.184
143	8.44	33.93a)	2.26	100	8.77	33.69	3.06	26.15	189.1	0.234
189	7.94	34.05a)	1.74	150	8.38	33.96	2.16	26.42	164.2	0.322
279	7.00	34.14	1.31	200	7.81	34.07	1.65	26.59	148.7	0.401
373	6.20	34.15	0.80	250	7.29	34.13	1.41	26.71	137.7	0.472
462	5.84	34.25	0.46	300	6.79	34.14	1.21	26.79	130.9	0.540
557	5.38	34.29	0.30	400	6.07	34.18	0.67	26.92	119.8	0.665
746	4.42	34.38	0.42	500	5.68	34.27	0.38	27.04	109.4	0.780
933	3.95	34.44	0.54	600	5.16	34.31	0.30	27.13	101.1	0.885
1129	3.40	34.50	0.74	700	4.64	34.36	0.36	27.23	92.1	0.982
				800	4.26	34.40	0.46	27.30	85.6	1.070
				1000	3.75	34.45	0.58	27.40	77.6	1.233

70.80 BLACK DOUGLAS; May 4, 1950; 0847 GCT; 35°13'N, 123°48'W; sounding, 2,210 fm; wind, 330°, force 5; weather, cloudy; sea, very rough; wire angle, 40°.

0	12.24	32.94	5.99	0	12.24	32.94	5.99	24.97	299.9	0.000
8	12.19	32.92	6.38	10	12.18	32.92	6.37	24.96	300.5	0.030
23	12.09	32.94	6.09	20	12.11	32.94	6.11	24.99	298.0	0.060
46	11.67	32.92	6.06	30	11.99	32.94	6.06	25.01	296.1	0.090
68	11.03	32.92	5.94	50	11.62	32.92	6.05	25.07	291.4	0.148
89	10.16	33.00	5.46	75	10.74	32.94	5.78	25.24	275.4	0.219
127	9.22	33.26	4.86	100	9.86	33.05	5.26	25.48	253.4	0.285
164	8.30	33.68	3.89	150	8.56	33.53	4.39	26.06	198.8	0.399
230	7.64	34.00	2.34	200	7.93	33.96	2.50	26.49	158.5	0.488
292	6.71	34.02	2.39	250	7.34	34.01	2.35	26.61	147.3	0.565
357	6.10	34.09	1.57	300	6.64	34.03	2.37	26.73	137.0	0.635
420	5.73	34.14	1.04	400	5.84	34.13	1.15	26.91	120.6	0.764
550	4.92	34.23	0.60	500	5.21	34.19	0.71	27.03	109.5	0.879
687	4.54	34.31	0.41	600	4.74	34.26	0.51	27.14	99.7	0.984
841	4.22	34.42	0.47	700	4.52	34.32	0.41	27.21	93.6	1.080
				800	4.33	34.39	0.43	27.29	87.1	1.171
				1000	(3.86)	(34.47)		(27.40)	(77.4)	(1.335)

a) Salinity bottles from 46 to 189 meters, inclusive, have been listed out of order on the original data sheet; present order is assumed to be correct, but these salinity data must be considered doubtful.

BLACK DOUGLAS; May 4, 1950; 1624 GCT; 34°53'N, 124°30'W; sounding, 2,340 fm; wind, 330°, force 5; weather, cloudy; sea, very rough; wire angle, 32°. 70.90

OBSERVED Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	INTERPOLATED Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	COMPUTED σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m
0	13.93	33.10	5.68		0	13.93	33.10	5.68		24.76	320.0	0.000
9	13.89	33.08	5.81		10	13.88	33.08	5.81		24.75	320.7	0.032
26	13.80	33.08	5.69		20	13.83	33.08	5.75		24.76	320.0	0.064
51	13.29	33.03	5.44		30	13.77	33.08	5.66		24.77	319.1	0.096
75	12.94	32.90	5.65		50	13.31	33.03	5.44		24.83	314.4	0.159
100	10.17a)	32.96	5.56		75	12.94	32.90	5.65		24.80	317.3	0.238
147	9.80	33.21	4.90		100	11.00	32.96	5.56		25.21	278.8	0.313
194	8.56	33.71	3.66		150	9.76	33.24	4.85		25.64	238.7	0.443
285	7.26	34.02	2.83		200	8.39	33.75	3.59		26.26	180.8	0.547
373	6.60	34.09	1.50		250	7.56	33.94	3.08		26.53	155.6	0.631
465	6.06	34.17	0.87		300	7.13	34.04	2.65		26.67	142.9	0.706
554	5.49	34.27	0.46		400	6.44	34.11	1.21		26.81	129.9	0.842
737	4.65	34.31	0.49		500	5.83	34.21	0.64		26.97	115.8	0.965
926	4.06	34.45	0.48		600	5.22	34.29	0.46		27.11	103.3	1.074
1120	3.52	34.51	0.64		700	4.79	34.30	0.47		27.17	98.4	1.175
					800	4.43	34.34	0.49		27.24	92.0	1.270
					1000	3.84	34.49	0.50		27.42	75.7	1.439

BLACK DOUGLAS; May 4, 1950; 2325 GCT; 34°33'N, 125°12'W; sounding, 2,520 fm; wind, 340°, force 5; weather, cloudy; sea, very rough; wire angle, 18°. 70.100

0	13.83	33.22	5.74		0	13.83	33.22	5.74		24.87	309.2	0.000
9	13.81	33.24	5.57		10	13.81	33.24	5.58		24.89	307.6	0.031
23	13.66	33.24	5.83		20	13.67	33.24	5.81		24.92	305.1	0.061
52	12.98	33.24	5.77		30	13.61	33.24	5.83		24.93	304.2	0.092
76	11.10	33.24	5.56		50	13.13	33.24	5.79		25.03	295.5	0.152
104	10.14	33.51	4.37		75	11.25	33.24	5.60		25.38	262.0	0.222
157	8.60	33.80	3.11		100	10.27	33.30	4.57		25.60	241.6	0.285
208	7.98	33.98	2.51		150	8.74	33.76	3.20		26.21	184.4	0.391
308	6.96	34.07	1.68		200	8.03	33.96	2.60		26.47	160.0	0.477
410	5.91	34.13	1.03		250	7.59	34.03	2.13		26.59	149.3	0.555
507	5.21	34.16	0.80		300	7.03	34.07	1.74		26.71	139.2	0.626
605	4.89	34.29	0.54		400	6.01	34.13	1.08		26.89	122.8	0.758
797	4.19	34.40	0.50		500	5.27	34.15	0.81		26.99	113.2	0.876
995	3.71	34.47	0.66		600	4.91	34.28	0.55		27.14	100.3	0.982
1192	3.23	34.54	0.77		700	4.54	34.36	0.50		27.24	90.9	1.078
					800	4.18	34.40	0.50		27.31	84.6	1.165
					1000	3.69	34.47	0.68		27.42	75.4	1.326

BLACK DOUGLAS; May 5, 1950; 0602 GCT; 34°13'N, 125°56'W; sounding, 2,200 fm; wind, 340°, force 3; weather, clear; sea, rough; wire angle, 35°. 70.110

0	13.73	33.06	5.91		0	13.73	33.06	5.91		24.76	319.2	0.000
3	13.74	33.12	5.88		10	13.74	33.16	5.83		24.84	312.1	0.032
16	13.68	33.17	5.83		20	13.68	33.17	5.84		24.86	310.5	0.063
40	13.68	33.15	5.93		30	13.68	33.16	5.91		24.85	311.5	0.094
61	13.61	33.15	5.88		50	13.64	33.15	5.94		24.85	311.9	0.156
85	11.58	33.24	5.81		75	13.36	33.23	5.84		24.97	301.3	0.233
128	9.39	33.24	4.86		100	10.34	33.24	5.65		25.54	247.1	0.301
170	8.68	33.73	3.14		150	8.91	33.27	3.77		25.80	223.3	0.419
249	7.61	34.00	2.36		200	8.38	33.80	2.75		26.30	177.0	0.519
333	6.60	34.07	1.63		250	7.59	34.00	2.34		26.57	151.5	0.601
413	5.87b)	34.13	1.04		300	7.00	34.05	1.90		26.69	140.4	0.674
494	5.60	34.13	0.56		400	5.99	34.13	1.12		26.89	122.5	0.806
652	4.48	34.29	-		500	5.58	34.13	(0.55)		26.94	118.5	0.926
819	4.14	34.40	0.41		600	4.82	34.23	(0.44)		27.11	102.9	1.037
989	3.70	34.45	0.58		700	4.38	34.33	(0.41)		27.24	91.2	1.134
					800	4.19	34.39	(0.41)		27.30	85.5	1.222
					1000	(3.68)	(34.45)	(0.60)		(27.40)	(76.7)	(1.384)

a) Alternate value, 12.60°C; both values rejected.
b) Alternate value, 6.12°C, not used in interpolation.

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OBSERVED					INTERPOLATED					COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m
70.120	**BLACK DOUGLAS**; May 5, 1950; 1258 GCT; 33°53'N, 126°35.5'W; sounding, 2,580 fm; wind, 340°, force 3; weather, cloudy; sea, rough; wire angle, 14°.											
0	14.31	33.19	5.70		0	14.31	33.19	5.70		24.74	321.1	0.000
10	14.32	33.18	5.77		10	14.32	33.18	5.77		24.74	322.1	0.032
24	14.24	33.21	5.88		20	14.24	33.20	5.85		24.77	319.3	0.064
48	14.31	33.21	5.85		30	14.26	33.21	5.88		24.77	319.2	0.096
72	14.25	33.15	5.53		50	14.32	33.21	5.81		24.76	321.0	0.160
95	14.14	33.36	5.96		75	14.24	33.15	5.55		24.73	324.4	0.241
145	12.05	33.42	5.19		100	14.14	33.37	5.95		24.92	307.0	0.320
189	9.37	33.53	4.30		150	11.83	33.43	5.07		25.42	259.9	0.461
276	7.91	34.02	2.41		200	9.01	33.59	4.04		26.03	202.0	0.577
368	6.90	34.07	1.59		250	8.17	33.98	2.85		26.47	161.4	0.668
455	5.92	34.27	1.08		300	7.68	34.04	2.14		26.59	150.7	0.746
547	5.65	34.27	0.56		400	6.51	34.14	1.37		26.83	128.6	0.885
727	4.68	34.34	0.38		500	5.72	34.27	0.83		27.03	109.9	1.005
911	3.99	34.42	0.48		600	5.47	34.28	0.44		27.07	107.2	1.113
1109	3.48	34.45	0.76		700	4.86	34.33	0.38		27.18	97.0	1.215
					800	4.32	34.37	0.39		27.27	88.5	1.308
					1000	3.73	34.44	0.60		27.39	78.1	1.474
70.130	**BLACK DOUGLAS**; May 5, 1950; 1916 GCT; 33°33'N, 127°17'W; sounding, 2,420 fm; wind, 340°, force 4; weather, partly cloudy; sea, rough; wire angle, 20°.											
0	15.27	33.26	5.65		0	15.27	33.26	5.65		24.59	335.6	0.000
10	15.28	33.24	5.52		10	15.28	33.24	5.52		24.58	337.1	0.034
24	15.17	33.30	5.65		20	15.18	33.29	5.62		24.64	331.9	0.067
52	15.29	33.26	5.50		30	15.18	33.29	5.65		24.64	332.2	0.100
76	15.25	33.28	5.64		50	15.28	33.26	5.50		24.59	337.0	0.167
104	13.58	33.21	5.73		75	15.25	33.28	5.62		24.61	335.6	0.251
155	11.56	33.27	5.36		100	13.90	33.22	5.71		24.85	313.2	0.332
206	9.05	33.62	4.28		150	11.84	33.27	5.44		25.30	271.8	0.478
307	7.74	33.96	2.34		200	9.19	33.59	4.45		26.01	204.8	0.598
411	6.74	34.13	1.09		250	8.37	33.77	3.32		26.27	179.9	0.694
509	5.48a)	34.14	0.99		300	7.80	33.94	2.45		26.49	159.8	0.779
607	4.96	34.25	0.57		400	6.84	34.12	1.14		26.77	134.5	0.926
802	4.10	34.31	0.36		500	5.59	34.14	1.00		26.95	117.9	1.052
1001	3.69	34.41	0.58		600	4.98	34.24	0.61		27.10	104.1	1.163
1199	3.26	34.49	0.83		700	4.59	34.30	0.41		27.19	96.0	1.263
					800	4.11	34.31	0.36		27.25	90.5	1.357
					1000	3.69	34.41	0.58		27.37	79.8	1.527
80.55	**HORIZON**; May 3, 1950; 1712 GCT; 34°21'N, 120°50'W; sounding, 470 fm; wind, 320°, force 3; weather, partly cloudy; sea, very rough; wire angle, 20°.											
0	12.26	33.73	6.25	1.01	0	12.26	33.73	6.25	1.01	25.57	242.1	0.000
10	12.09	33.71	6.26	1.01	10	12.09	33.71	6.26	1.01	25.59	240.7	0.024
24	11.66	33.71	5.74	1.20	20	11.75	33.71	5.85	1.12	25.65	234.8	0.048
47	10.08	33.78	3.96	1.70	30	11.50	33.72	5.47	1.34	25.70	229.9	0.071
71	9.29	33.89	2.62	2.16b)	50	9.93	33.80	3.65	1.76	26.05	198.1	0.114
94	8.88	33.95	2.07	2.34	75	9.19	33.90	2.50	2.20	26.25	179.5	0.161
145	8.51	34.11	1.61	2.48	100	8.84	33.98	2.00	2.36	26.37	168.7	0.205
191	8.18	34.11	1.34	2.51	150	8.48	34.11	1.58	2.49	26.52	154.6	0.285
237	7.90	34.13	1.24	2.71	200	8.13	34.11	1.33	2.55	26.58	150.3	0.362
283	7.64	34.16	1.03	2.69	250	7.82	34.14	1.14	2.71	26.65	144.5	0.435
382	7.16	34.22	0.88	2.82	300	7.57	34.17	1.00	2.70	26.71	139.5	0.507
476	6.50	34.26	0.57	3.01	400	7.05	34.23	0.81	2.85	26.83	129.3	0.641
576	5.80	34.27	0.44	3.12	500	6.32	34.26	0.52	3.04	26.95	118.5	0.765
673	5.20	34.33	0.37	3.23	600	5.64	34.27	0.41	3.16	27.04	110.1	0.879
776	4.62	34.39	0.49	3.20	700	5.05	34.35	0.38	3.22	27.18	97.9	0.983
					800	(4.54)	(34.40)	(0.54)	(3.08)	(27.27)	(88.9)	(1.077)

a) Alternate value, 6.10°C, not used in interpolation.

b) Alternate value, 2.07 μg at/L, not used in interpolation.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

HORIZON; May 3, 1950; 2057 GCT; 34°10'N, 121°10'W; sounding, 1,400 fm; wind, 320°, force 3; weather, cloudy; sea, very rough; wire angle, 30°. 80.60

0	12.36	33.48	5.85	1.01	0	12.36	33.48	5.85	1.01	25.36	262.5	0.000
9	12.23	33.50	6.18	1.07	10	12.21	33.50	6.18	1.07	25.41	258.3	0.026
22	12.04	33.55	5.74	1.12	20	12.07	33.54	5.74	1.11	25.46	253.1	0.052
43	11.80	33.64	5.78	1.19	30	11.95	33.59	5.75	1.15	25.52	247.5	0.076
64	10.08	33.44	4.71	1.55	50	11.75	33.60	5.78	1.26	25.57	243.6	0.126
85	9.60	33.66	3.94	1.82	75	9.80	33.48	4.20	1.70	25.82	220.1	0.184
129	8.77	33.95	2.39r	2.10	100	9.37	33.83	3.65	1.92	26.16	188.0	0.235
170	7.84	34.00	2.70	2.27	150	8.30	33.98	2.93	2.18	26.45	161.6	0.322
250	7.04	34.05	1.78	2.56	200	7.50	34.02	2.37	2.39	26.60	148.0	0.400
336	6.20	34.11	1.27	2.62	250	7.04	34.05	1.78	2.56	26.69	140.2	0.471
419	5.59	34.13	0.87	3.11r	300	6.52	34.09	1.43	2.60	26.79	131.0	0.540
508	5.30	34.20	0.59	3.08	400	5.72	34.13	0.95	2.73	26.92	119.1	0.664
686	4.95	34.34	0.33	3.29	500	5.32	34.19	0.60	3.06	27.02	110.8	0.780
871	4.34	34.40	0.42	3.28	600	5.10	34.28	0.42	3.22	27.11	102.6	0.886
1071	3.83	34.43	0.62	3.22	700	4.90	34.35	0.33	3.29	27.19	96.0	0.986
					800	4.56	34.38	0.35	3.29	27.26	90.7	1.079
					1000	3.98	34.42	0.55	3.23	27.35	82.5	1.252

HORIZON; May 4, 1950; 0310 GCT; 33°50'N, 121°51'W; sounding, 2,100 fm; wind, 320°, force 3; weather, squally; sea, very rough; wire angle, 34°. 80.70

0	13.92	33.29	6.05	0.49	0	13.92	33.29	6.05	0.49	24.90	305.8	0.000
9	13.91	33.28	6.04	0.52	10	13.90	33.28	6.04	0.53	24.90	306.4	0.030
21	13.44	33.29	6.02	0.58	20	13.45	33.29	6.02	0.58	25.00	297.2	0.061
42	11.58	33.35	6.23	1.07	30	12.10	33.30	6.10	0.80	25.27	271.5	0.089
62	11.46	33.53	6.23	1.26	50	11.53	33.45	6.23	1.14	25.49	250.8	0.141
81	10.18	33.48	4.56	1.49	75	11.17	33.48	5.10	1.42	25.58	242.9	0.203
123	8.79	33.79	2.81	2.13	100	9.23	33.59	3.37	1.88	26.00	203.6	0.259
158	8.31	34.00	2.62	2.27	150	8.41	33.98	2.67	2.24	26.43	163.2	0.351
225	7.56	34.05	2.07	2.53a)	200	7.80	34.05	2.35	2.43	26.58	150.0	0.428
299	6.64	34.06	1.58	2.75b)	250	7.27	34.05	1.87	2.62	26.65	143.4	0.502
374	5.92	34.09	1.14	2.78	300	6.64	34.06	1.57	2.75	26.75	135.0	0.571
455	5.54	34.18	0.57	3.04c)	400	5.78	34.11	0.91	2.82	26.90	121.3	0.700
615	4.79	34.31	0.34	3.20	500	5.35	34.22	0.43	3.12	27.04	109.0	0.815
784	4.27d)	34.39	0.37	3.15	600	4.87	34.30	0.34	3.20	27.16	98.3	0.918
970	3.88	34.46	0.55	3.12	700	4.50	34.35	0.35	3.19	27.24	91.2	1.013
					800	4.23	34.40	0.38	3.14	27.31	85.2	1.102
					1000	(3.82)	(34.47)	(0.59)	(3.12)	(27.41)	(76.9)	(1.264)

HORIZON; May 4, 1950; 0923 GCT; 33°28'N, 122°32'W; sounding, 2,100 fm; wind, 320°, force 5; weather, cloudy; sea, very rough; wire angle, 43°. 80.80

0	13.96	33.28	5.64	0.54	0	13.96	33.28	5.64	0.54	24.89	307.2	0.000
8	13.96	33.28	5.77	0.48	10	13.95	33.28	5.80	0.48	24.89	307.4	0.031
23	13.94	33.28	5.93	0.56	20	13.95	33.28	5.93	0.54	24.89	307.7	0.061
45	12.84	33.28	5.87	0.66	30	13.85	33.28	5.91	0.59	24.91	306.0	0.092
66	11.15	33.37	5.26	1.11	50	12.50	33.28	5.82	0.74	25.18	280.8	0.151
88	9.84	33.42	4.41	1.59	75	10.50	33.39	5.00	1.36	25.63	238.2	0.216
129	8.68	33.78	3.13	2.17	100	9.40	33.47	3.95	1.80	25.88	215.1	0.273
170	8.09	33.95	2.56	2.32	150	8.35	33.90	2.80	2.26	26.38	168.2	0.368
254	7.30	34.06	1.65	2.69	200	7.77	34.00	2.25	2.44	26.54	153.3	0.413
334	6.58	34.13	1.06	2.88	250	7.33	34.06	1.70	2.68	26.65	143.5	0.523
419	6.11	34.21	0.67	3.10	300	6.88	34.10	1.27	2.82	26.75	135.1	0.592
499	5.73	34.27	0.42	3.18	400	6.20	34.19	0.75	3.03	26.91	120.8	0.720
672	4.85	34.36	0.36	3.28	500	5.72	34.27	0.42	3.18	27.03	109.9	0.835
858	4.22	34.45	0.42	3.27	600	5.21	34.33	0.37	3.22	27.14	100.2	0.940
1061	3.72	34.49	0.65	3.25	700	4.73	34.38	0.37	3.28	27.24	91.7	1.036
					800	4.39	34.42	0.40	3.28	27.31	85.6	1.125
					1000	3.88	34.49	0.58	3.26	27.41	76.2	1.287

a) Alternate value, 2.38 μg at/L, not used in interpolation.
b) Alternate value, 2.61 μg at/L, not used in interpolation.
c) Alternate value, 3.13 μg at/L, not used in interpolation.
d) Alternate value, 4.16°C, not used in interpolation.

SIO

CCOFI 5005

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

80.90 HORIZON; May 4, 1950; 1606 GCT; 33°09'N, 123°13'W; sounding, 2,160 fm; wind, 320°, force 5; weather, cloudy; sea, high; wire angle, 34°.

0	14.14	33.03	5.82	0.59	0	14.14	33.03	5.82	0.59	24.66	329.4	0.000
9	14.14	33.03	5.78	0.55	10	14.14	33.03	5.77	0.55	24.66	329.7	0.033
17	14.14	33.01	5.77	0.54	20	14.13	33.01	5.77	0.54	24.64	331.0	0.066
59	11.48	33.04	5.83	0.79	30	14.13	33.01	5.78	0.57	24.64	331.3	0.099
84	9.69	33.11	5.28	1.26	50	13.15	33.02	5.81	0.70	24.85	312.0	0.163
109	9.28	33.48	4.29	1.55	75	10.10	33.08	5.62	1.14	25.46	254.5	0.234
159	8.54	33.83	2.92	1.79	100	9.38	33.26	4.55	1.45	25.72	230.3	0.295
208	7.86	33.96	3.43r	1.94	150	8.65	33.78	2.98	1.76	26.24	181.6	0.398
309	6.28	33.96	2.39	1.83r	200	7.95	33.96	(2.68)	1.92	26.49	158.8	0.483
405	5.68	34.13	0.95	2.84	250	7.08	33.96	(2.53)	(2.07)	26.61	147.4	0.559
506	5.37	34.23	0.44	3.02	300	6.36	33.96	(2.42)	(2.26)	26.71	138.6	0.630
604	4.92	34.31	0.30	3.18	400	5.69	34.12	1.00	(2.81)	26.92	119.4	0.760
809	4.22	34.42	0.40	3.20	500	5.40	34.23	0.45	3.01	27.04	108.9	0.874
1017	3.66	34.51	0.59	3.16	600	4.95	34.31	0.30	3.18	27.16	98.5	0.978
1226	3.25	34.54	0.85	3.13	700	4.55	34.38	0.32	3.20	27.26	89.5	1.072
					800	4.25	34.42	0.40	3.20	27.32	84.0	1.158
					1000	3.72	34.50	0.58	3.17	27.44	73.5	1.316

80.100 HORIZON; May 4, 1950; 2152 GCT; 32°49'N, 123°54'W; sounding, 2,460 fm; wind, 340°, force 5; weather, cloudy; sea, very rough; wire angle, 27°.

0	14.34	33.18	5.10r	0.54	0	14.34	33.18	(5.85)	0.54	24.73	322.2	0.000
10	14.32	33.17	5.85	0.54	10	14.32	33.17	5.85	0.54	24.73	322.8	0.032
27	14.15	33.20	5.89	0.56	20	14.20	33.19	5.87	0.55	24.77	319.2	0.064
54	12.10	33.15	6.02	0.70	30	14.15	33.20	5.88	0.58	24.79	317.8	0.096
81	10.62	33.25	5.54	1.11	50	12.50	33.15	6.01	0.66	25.08	290.3	0.157
107	9.46	33.51	4.23	1.70	75	10.82	33.21	5.80	1.01	25.44	256.8	0.225
160	8.43	33.87	2.96	2.15	100	9.70	33.44	4.42	1.64	25.81	222.0	0.285
213	7.79	34.01	2.85	2.24	150	8.55	33.83	3.07	2.09	26.29	176.4	0.385
316	6.75	34.05	1.65	2.69	200	7.90	33.99	2.87	2.22	26.52	155.9	0.468
413	6.00	34.14	1.05	2.97	250	7.37	34.03	2.55	2.37	26.62	146.2	0.570
517	5.06	34.22	0.66	3.10	300	6.90	34.05	1.83	2.60	26.71	139.1	0.615
619	4.42	34.26	0.43	3.16	400	6.10	34.12	1.10	2.95	26.87	124.7	0.747
810	3.96	34.43	0.52	3.23	500	5.23	34.21	0.71	3.08	27.04	108.2	0.863
993	3.62	34.51	0.68a)	3.18	600	4.51	34.25	0.45	3.15	27.16	97.7	0.966
1176	3.28	34.51	-	3.19	700	4.20	34.32	0.45	3.18	27.25	89.9	1.060
					800	3.97	34.42	0.51	3.23	27.35	80.7	1.145
					1000	3.60	34.51	(0.69)	3.18	27.46	71.4	1.297

80.110 HORIZON; May 5, 1950; 0402 GCT; 32°29'N, 124°34.5'W; sounding, 2,560 fm; wind, 360°, force 3; weather, cloudy; sea, very rough; wire angle, 32°.

0	14.14	33.11b)	5.89	0.52	0	14.14	33.11	5.89	0.52	24.72	323.6	0.000
9	14.12	33.10b)	5.83	0.53	10	14.12	33.10	5.83	0.53	24.72	324.0	0.032
21	14.12	33.10b)	5.97	0.54	20	14.12	33.10	5.97	0.54	24.72	324.0	0.065
47	13.96	33.06b)	5.94	0.53	30	14.10	33.10	5.97	0.54	24.72	324.1	0.097
68	12.07	32.97	6.06	0.66	50	13.88	33.05	5.95	0.54	24.73	324.0	0.162
93	11.16	33.13	5.97	0.86	75	12.03	32.98	6.05	0.72	25.04	294.9	0.239
137	9.52	33.44	4.30	1.70	100	10.90	33.18	5.65	0.94	25.40	260.9	0.309
181	8.33	33.80	3.60	1.94	150	9.10	33.53	4.10	1.80	25.98	206.9	0.426
268	7.15	34.04	2.14	2.46	200	8.03	33.93	3.25	2.04	26.45	162.2	0.518
360	6.20	34.09	1.28	2.77	250	7.36	34.03	2.32	2.34	26.63	146.1	0.595
449	5.57	34.14	0.88	2.91	300	6.80	34.06	1.80	2.61	26.73	137.0	0.666
540	5.23	34.25	0.42	3.06	400	5.87	34.11	1.06	2.84	26.89	122.5	0.796
721	4.26	34.30	0.36	3.12	500	5.39	34.20	0.57	2.99	27.02	111.0	0.912
911	3.88	34.42	0.46	3.04	600	4.88	34.28	0.37	3.09	27.14	99.9	1.018
1105	3.44	34.52	0.79	3.05	700	4.36	34.30	0.36	3.12	27.21	93.2	1.114
					800	4.04	34.33	0.37	3.08	27.27	88.2	1.205
					1000	3.70	34.48	0.60	3.04	27.43	74.8	1.368

a) Mean value of 0.63 and 0.73 ml/L.

b) Large reading error may have occurred during titration; the values listed are assumed to be correct.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
HORIZON; May 5, 1950; 1015 GCT; 32°09'N, 125°15.5'W; sounding, 2,400 fm; wind, 320°, force 2; weather, partly cloudy; sea, very rough; wire angle, 32°.													80.120
0	15.06	33.24	5.67	0.53	0	15.06	33.24	5.67	0.53	24.63	332.3	0.000	
10	15.04	33.21	5.75	0.52	10	15.04	33.21	5.75	0.52	24.60	334.8	0.033	
22	15.05	33.22	5.60	0.55	20	15.05	33.22	5.61	0.55	24.61	334.3	0.067	
48	15.95	33.57	5.55	0.49	30	15.07	33.46	5.59	0.54	24.79	317.4	0.099	
69	15.96	33.58	5.52	0.53	50	15.95	33.57	5.55	0.49	24.68	328.6	0.165	
93	15.22	33.57	5.73	0.52	75	15.95	33.58	5.54	0.53	24.69	328.6	0.246	
138	11.92	33.19	5.45	0.91	100	14.80	33.55	5.73	0.58	24.92	307.2	0.326	
181	9.96	33.49	4.66	1.39	150	11.25	33.21	5.23	1.04	25.36	265.8	0.469	
268	8.10	33.96	3.11	2.13	200	9.50	33.71	4.27	1.60	26.05	200.8	0.586	
359	6.54	34.04	2.49	2.49	250	8.42	33.93	3.34	2.02	26.39	168.8	0.678	
448	6.06a)	34.18	1.41	3.00	300	7.49	34.00	2.80	2.28	26.58	150.9	0.758	
538	5.21	34.20	0.63	3.13	400	6.30	34.11	2.05	2.67	26.83	128.0	0.897	
722	4.61	34.36	0.29	3.40u	500	5.57	34.20	0.87	3.10	27.00	113.2	1.018	
916	3.96	34.45	0.43	3.24	600	4.93	34.23	0.41	(3.16)	27.10	104.2	1.127	
1112	3.54	34.52	0.75	3.24b)	700	4.65	34.33	0.29	(3.20)	27.21	94.5	1.226	
					800	4.35	34.41	0.31	(3.22)	27.30	85.9	1.316	
					1000	3.75	34.48	0.55	3.24	27.42	75.4	1.477	
HORIZON; May 5, 1950; 1628 GCT; 31°50'N, 125°57'W; sounding, 2,450 fm; wind, 340°, force 4; weather, partly cloudy; sea, very rough; wire angle, 35°.													80.130
0	15.86	33.48	5.62	0.45	0	15.86	33.48	5.62	0.45	24.63	331.8	0.000	
8	15.84	33.49	5.71	0.46	10	15.84	33.49	5.68	0.46	24.64	330.9	0.033	
20	15.85	33.50	5.50	0.48	20	15.85	33.50	5.50	0.48	24.65	330.5	0.066	
44	15.85	33.49	5.56	0.48	30	15.85	33.50	5.52	0.48	24.65	331.0	0.099	
64	15.73	33.49	5.59	0.48	50	15.83	33.49	5.58	0.48	24.65	331.9	0.165	
88	14.82	33.39	5.53	0.51	75	15.55	33.46	5.57	0.49	24.69	328.8	0.248	
132	14.05	33.68	5.40	0.54	100	14.60	33.42	5.51	0.52	24.86	312.6	0.328	
175	11.24	33.53	4.86	1.11	150	12.57	33.60	5.20	0.70	25.41	261.0	0.471	
263	8.46	33.93	3.09	2.13	200	10.27	33.69	4.47	1.70	25.90	214.8	0.590	
356	7.16	34.02	2.08	2.47	250	8.75	33.91	3.40	2.08	26.33	175.3	0.688	
447	5.71	33.98	1.75	2.77	300	7.93	33.97	2.55	2.25	26.50	159.5	0.772	
539	5.00	34.09	0.98	2.98	400	6.43	34.00	1.92	2.61	26.73	137.9	0.921	
727	4.42	34.27	0.37	3.21	500	5.22	34.02	1.27	2.91	26.90	122.2	1.051	
926	3.94	34.43	0.52	3.21	600	4.77	34.16	0.67	3.08	27.06	107.5	1.166	
1126	3.46	34.51	0.89	3.22	700	4.49	34.25	0.40	3.19	27.16	98.5	1.269	
					800	4.26	34.32	0.40	3.21	27.24	91.5	1.364	
					1000	3.75	34.48	0.67	3.21	27.42	75.4	1.530	
HORIZON; May 12, 1950; 1110 GCT; 33°44'N, 120°24.5'W; sounding, 350 fm; wind, 320°, force 4; weather, overcast; sea, moderate; wire angle, 30°.													83.55
0	12.12	33.51	5.85	1.17	0	12.12	33.51	5.85	1.17	25.43	255.7	0.000	
9	12.10	33.53	5.86	1.15	10	12.10	33.54	5.87	1.14	25.46	253.4	0.025	
22	11.81	33.60	5.79	1.23	20	12.08	33.60	5.82	1.21	25.51	248.9	0.050	
44	10.36	33.48	4.70	1.54	30	10.77	33.55	5.50	1.37	25.71	229.9	0.074	
64	10.24	33.57	4.55	1.67	50	10.31	33.49	4.62	1.60	25.74	227.2	0.120	
84	9.28	33.84	3.09	2.04	75	10.00	33.74	4.30	1.79	25.99	204.1	0.174	
128	8.51	34.02	1.87	2.44	100	8.83	33.93	2.35	2.26	26.33	172.3	0.221	
168	8.24	34.09	1.61	2.56	150	8.35	34.06	1.72	2.49	26.50	156.4	0.303	
208	8.02	34.13	1.41	2.78	200	8.06	34.12	1.45	2.77	26.60	148.6	0.380	
250	7.78	34.16	1.23	2.78	250	7.78	34.16	1.23	2.78	26.67	142.4	0.452	
298	7.50	34.18	1.04	2.83	300	7.49	34.18	1.02	2.83	26.73	137.6	0.523	
343	7.13	34.22	0.86	2.91	400	6.74	34.23	0.65	3.04	26.87	125.0	0.654	
395	6.76	34.23	0.68	3.02									
439	6.54	34.26	0.55	3.08									

a) Alternate value, 6.51°C, not used in interpolation.
b) Alternate value, 3.13 μg at/L, not used in interpolation.

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

83.60 HORIZON; May 12, 1950; 0729 GCT; 33°34'N, 120°45'W; sounding, 850 fm; wind, 320°, force 4; weather, overcast; sea, moderate; wire angle, 13°.

0	12.29	33.42	5.57	0.97	0	12.29	33.42	5.57	0.97	25.32	265.6	0.000
9	12.22	33.42	5.96	0.98	10	12.22	33.42	5.95	0.99	25.34	264.4	0.026
24	12.05	33.46	5.80	1.07	20	12.08	33.44	5.85	1.06	25.38	260.6	0.053
53	11.90	33.49	5.88	1.10	30	12.02	33.47	5.81	1.08	25.42	257.6	0.079
77	11.69	33.50	5.60	1.24	50	11.93	33.49	5.90	1.10	25.45	255.0	0.130
105	9.38	33.56	3.88	1.81	75	11.70	33.50	5.65	1.18	25.50	250.7	0.193
158	8.37	33.93	2.77	2.12	100	9.57	33.54	4.12	1.77	25.90	212.6	0.251
210	7.62	34.00	2.58	2.33	150	8.50	33.86	2.85	2.09	26.32	173.4	0.347
312	6.62	34.05	1.61	2.67	200	7.76	33.99	2.62	2.29	26.54	153.9	0.430
420	5.80	34.14	0.98	2.90	250	7.19	34.02	2.32	2.47	26.64	144.5	0.504
522	5.10	34.20	0.64	3.03	300	6.72	34.04	1.77	2.63	26.72	137.4	0.574
625	4.89	34.28	0.41	3.16	400	5.95	34.12	1.05	2.86	26.89	122.7	0.704
828	4.30	34.42	0.50	3.17	500	5.23	34.19	0.67	3.01	27.03	109.7	0.820
1035	3.79	34.47	0.69	3.18	600	4.92	34.26	0.43	3.14	27.12	101.9	0.926
1236	3.34	34.52	0.89	3.12	700	4.71	34.34	0.41	3.17	27.21	94.4	1.024
					800	4.40	34.40	0.47	3.17	27.29	87.2	1.116
					1000	3.87	34.47	0.65	3.18	27.40	77.5	1.281

83.70 HORIZON; May 12, 1950; 0116 GCT; 33°14.5'N, 121°26'W; sounding, 2,200 fm; wind, 320°, force 5; weather, overcast; sea, moderate; wire angle, 33°.

0	13.90	33.30	5.93	0.57a)	0	13.90	33.30	5.93	0.57	24.92	304.7	0.000
8	13.88	33.30	5.88	-	10	13.86	33.30	5.88	0.52	24.92	304.2	0.030
21	13.74	33.29	5.96	0.50	20	13.74	33.29	5.95	0.50	24.94	302.8	0.061
46	13.61	33.31	6.01	0.56	30	13.68	33.30	5.98	0.51	24.96	301.2	0.091
66	13.41	33.29	6.06	0.61	50	13.61	33.31	6.05	0.57	24.98	299.6	0.151
91	11.16	33.30	5.52	1.02	75	13.20	33.29	6.00	0.70	25.05	293.8	0.225
135	9.40	33.55	3.90	1.76	100	10.68	33.32	5.25	1.22	25.55	246.9	0.293
178	8.36	33.91	2.70	2.18	150	9.00	33.78	3.22	1.94	26.18	186.9	0.402
261	7.23	34.00	2.30	2.41	200	7.95	33.94	2.54	2.28	26.47	160.3	0.488
348	6.54	34.07	1.23	2.80	250	7.32	33.99	2.35	2.39	26.60	148.5	0.566
434	5.76	34.13	0.85	2.96	300	6.90	34.03	1.85	2.55	26.69	140.5	0.638
522	5.22	34.27	0.57	3.02	400	6.08	34.11	1.00	2.91	26.86	125.2	0.770
699	4.64	34.38	0.41	3.16	500	5.34	34.23	0.62	3.01	27.05	108.1	0.887
886	4.08	34.45	0.54	3.15	600	4.91	34.33	0.45	3.10	27.18	96.6	0.989
1079	3.60	34.45	0.77	3.17	700	4.63	34.38	0.40	3.16	27.25	90.5	1.083
					800	4.35	34.42	0.45	3.16	27.31	85.2	1.170
					1000	3.78	34.45	0.68	3.16	27.39	77.9	1.333

83.80 HORIZON; May 11, 1950; 1903 GCT; 32°49'N, 122°06'W; sounding, 2,300 fm; wind, 320°, force 5; weather, overcast; sea, moderate; wire angle, 38°.

0	13.84	33.30	6.01	0.58	0	13.84	33.30	6.01	0.58	24.93	303.7	0.000
8	13.82	33.31	5.81	0.56	10	13.82	33.31	5.84	0.55	24.94	302.7	0.030
20	13.80	33.35	5.92	0.55	20	13.80	33.35	5.92	0.55	24.97	299.6	0.060
44	13.45	33.31	5.97	0.58	30	13.80	33.35	5.96	0.55	24.97	299.9	0.090
63	11.64	33.24	5.92	0.86	50	13.15	33.27	5.97	0.66	25.04	293.7	0.150
87	10.49	33.24	5.33	1.23	75	11.00	33.24	5.67	1.04	25.43	257.7	0.219
130	9.61	33.57	3.96	1.77	100	10.18	33.25	4.97	1.44	25.58	243.8	0.281
170	8.58	33.86	2.98	2.20	150	9.10	33.77	3.15	1.96	26.16	189.2	0.390
248	7.72	34.04	2.56	2.34	200	8.19	33.95	2.85	2.31	26.44	163.1	0.477
326	6.70	-	-	-	250	7.70	(34.04)	(2.55)	(2.34)	(26.59)	(150.1)	(0.556)
405	6.00	34.13	1.09	2.87	300	7.03	(34.09)	(2.12)	(2.40)	(26.72)	(137.9)	(0.628)
485	5.31	34.16	0.74	2.99	400	6.04	(34.13)	(1.14)	(2.83)	(26.88)	(123.1)	(0.758)
651	4.70	34.34	0.47	3.22	500	5.23	34.17	0.70	3.00	27.01	111.2	(0.876)
836	4.15	34.42	0.40	3.29	600	4.84	34.28	0.51	3.09	27.14	99.4	(0.981)
1028	3.60	34.51	0.79	3.23	700	4.57	34.38	0.43	3.27	27.25	89.8	(1.075)
					800	4.27	34.41	0.40	3.29	27.31	84.9	(1.163)
					1000	3.67	34.50	0.74	3.24	27.44	72.9	(1.320)

a) Alternate value, 0.47 μg at/L, not used in interpolation.

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

HORIZON; May 11, 1950; 1250 GCT; 32°33'N, 122°47'W; sounding, 2,400 fm; wind, 320°, force 4; weather, partly cloudy; sea, moderate; wire angle, 24°. 83.90

0	14.02	33.04	5.68	0.60	0	14.02	33.04	5.68	0.60	24.69	326.1	0.000
9	14.01	33.01	5.88	0.52	10	14.01	33.01	5.89	0.52	24.67	328.4	0.033
27	14.02	33.00	5.97	0.54	20	14.01	33.00	5.94	0.53	24.66	329.4	0.066
55	13.92	33.01	5.84	0.54	30	14.02	33.00	5.96	0.54	24.66	329.8	0.099
82	13.38	33.19	5.97	0.59	50	14.01	33.00	5.86	0.54	24.66	330.2	0.164
109	11.38	33.10	5.57	0.83	75	13.64	33.04	5.96	0.56	24.77	320.6	0.246
163	9.43	33.48	3.71	1.50	100	12.40	33.08	5.75	0.76	25.04	294.8	0.323
217	8.26	33.89	3.18	2.07	150	9.73	33.29	3.93	1.28	25.68	234.5	0.455
323	6.94	34.05	2.16	2.53	200	8.62	33.83	3.33	1.96	26.28	178.3	0.559
427	5.94	34.14	1.04	2.84	250	7.78	33.96	2.87	2.24	26.51	157.2	0.642
526	5.00	34.21	0.71	3.10	300	7.18	34.03	2.38	2.45	26.65	144.4	0.717
640	4.64	34.29	0.47	3.19	400	6.23	34.12	1.28	2.77	26.85	126.4	0.853
856	4.06	34.45	0.52	3.25a)	500	5.20	34.19	0.75	3.03	27.03	109.4	0.971
1069	3.58	34.52	0.77	3.22b)	600	4.73	34.26	0.52	3.18	27.14	99.6	1.075
1277	3.12	34.54	0.99	3.11	700	4.50	34.34	0.48	3.22	27.23	91.9	1.171
					800	4.24	34.41	0.50	3.25	27.31	84.6	1.259
					1000	3.72	34.50	0.65	3.23	27.44	73.5	1.418

HORIZON; May 9, 1950; 1959 GCT; 33°50'N, 118°37.5'W; sounding, 400 fm; wind, 280°, force 3; weather, clear; sea, moderate; wire angle, 23°. 87.35

0	13.64	33.53	5.89	0.89	0	13.64	33.53	5.89	0.89	25.15	282.6	0.000
10	12.89	33.54	5.80	0.80	10	12.89	33.54	5.80	0.80	25.31	267.8	0.027
24	11.64	33.51	5.05	1.19	20	11.93	33.52	5.45	1.00	25.47	252.1	0.053
46	9.62	33.74	3.29	2.01	30	10.85	33.52	4.30	1.56	25.67	233.5	0.078
68	9.05	33.90	2.58	2.25	50	9.43	33.81	3.15	2.09	26.14	189.4	0.120
91	8.92	33.93	2.00	2.28	75	9.02	33.91	2.38	2.26	26.28	176.2	0.166
139	8.43	34.07	1.51	2.38	100	8.83	33.95	1.88	2.29	26.34	170.8	0.209
182	8.16	34.16	1.27	2.57	150	8.34	34.10	1.43	2.42	26.54	153.2	0.290
225	7.91	34.17	1.17	2.74	200	8.05	34.17	1.22	2.64	26.64	144.7	0.365
268	7.78	34.18	0.99	2.87	250	7.83	34.17	1.07	2.82	26.67	142.4	0.436
316	7.53	34.20	0.81	2.88	300	7.63	34.19	0.88	2.88	26.71	138.9	0.507
360	7.21	34.22	0.55	2.98	400	6.93	34.25	0.39	3.06	26.86	126.1	0.639
447	6.60	34.27	0.33	3.11	500	6.25	34.28		3.18	26.97	116.1	0.761
540	5.98	34.28	-	3.21								

HORIZON; May 10, 1950; 0016 GCT; 33°40'N, 118°58.5'W; sounding, 540 fm; wind, 280°, force 3; weather, clear; sea, moderate; wire angle, 35°. 87.40

0	14.94	33.58	5.99	0.56	0	14.94	33.58	5.99	0.56	24.91	305.1	0.000
9	14.06	33.55	6.50	0.57	10	13.60	33.55	6.50	0.57	25.17	280.8	0.029
21	11.64	33.53	4.86	1.24	20	11.75	33.53	5.15	1.08	25.52	248.1	0.056
42	9.97	33.70	3.55	1.79	30	10.70	33.54	4.05	1.62	25.71	229.5	0.080
62	9.61	33.75	3.19	2.03	50	9.82	33.72	3.40	1.89	26.00	202.2	0.123
82	9.16	33.84	2.90	2.10	75	9.31	33.80	3.00	2.07	26.15	188.8	0.172
124	8.55	34.04	2.24	2.33	100	8.88	33.95	2.61	2.19	26.34	171.5	0.217
163	8.08	34.14	1.57	2.63	150	8.22	34.11	1.75	2.53	26.56	150.8	0.297
240	7.58	34.20	1.06	2.85	200	7.82	34.18	1.26	2.75	26.68	140.6	0.370
320	6.96	34.21	0.73	3.02	250	7.50	34.20	1.02	2.88	26.74	135.5	0.439
398	6.40	34.29	0.50	3.13	300	7.12	34.21	0.80	2.98	26.80	130.2	0.506
478	5.95	34.33	0.38	3.07	400	6.40	34.30	0.50	3.09	26.97	115.2	0.628
542	5.67	34.33	0.34	3.14	500	5.85	34.33	0.37	3.07	27.06	107.2	0.740
611	5.38	34.34	0.24r	-	600	5.42	34.34			27.12	102.1	0.844
680	5.31	34.38	0.24r	-								

HORIZON; May 10, 1950; 0600 GCT; 33°20'N, 119°39.5'W; sounding, 40 fm; wind, 280°, force 3; weather, clear; sea, slight; wire angle, 2°. 87.50

0	12.93	33.57	5.57	0.97	0	12.93	33.57	5.57	0.97	25.32	266.2	0.000
10	12.92	33.58	6.06	0.89	10	12.92	33.58	6.06	0.89	25.33	265.6	0.026
20	11.58	33.71	4.69	1.36	20	11.58	33.71	4.69	1.36	25.69	232.0	0.051
30	11.19	33.76	4.35	1.50	30	11.19	33.76	4.35	1.50	25.81	220.3	0.074
40	9.53	33.82	2.56	2.03	50	9.08	33.95	2.94	2.20	26.30	173.6	0.114
50	9.08	33.95	2.94	2.20								

a) Alternate value, 3.15 μg at/L, not used in interpolation.
b) Alternate value, 3.14 μg at/L, not used in interpolation.

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

87.60 HORIZON; May 10, 1950; 1145 GCT; 33°00'N, 120°21.5'W; sounding, 350 fm; wind, 320°, force 3; weather, clear; sea, rough; wire angle, 28°.

0	12.02	33.40	5.72	1.05	0	12.02	33.40	5.72	1.05	25.36	262.2	0.000
10	11.96	33.40	5.80	0.97	10	11.96	33.40	5.80	0.97	25.38	261.2	0.026
23	11.90	33.42	5.71	1.01	20	11.91	33.41	5.73	1.00	25.39	259.8	0.052
45	11.85	33.46	5.74	1.07	30	11.88	33.44	5.72	1.03	25.42	257.3	0.078
66	11.86	33.47	5.89	1.11	50	11.85	33.47	5.78	1.08	25.45	255.0	0.129
88	11.06	33.46	5.40	1.26	75	11.85	33.47	5.84	1.16	25.45	255.6	0.193
130	9.01	33.71	3.36	1.98	100	10.13	33.47	4.48	1.41	25.76	226.7	0.253
176	8.50	33.94	3.88	1.82	150	8.80	33.87	3.51	1.94	26.29	177.2	0.354
216	7.78	33.98	3.68	2.03	200	8.06	33.97	3.80	1.89	26.48	159.7	0.438
256	7.28	34.02	2.99	2.26	250	7.35	34.01	3.10	2.23	26.61	147.4	0.516
300	6.64	34.04	2.10	2.54	300	6.64	34.04	2.10	2.54	26.73	136.6	0.586
341	6.14	34.10	1.51	2.75	400	5.72	34.13	1.14	2.90	26.92	119.1	0.714
383	5.86	34.12	1.23	2.85	500	5.40	34.23	0.66	3.14	27.04	108.9	0.828
428	5.52	34.15	1.04	2.98								
529	5.40	34.26	0.54	3.16								

87.70 HORIZON; May 10, 1950; 1758 GCT; 32°40'N, 121°04'W; sounding, 2,300 fm; wind, 320°, force 4; weather, partly cloudy; sea, moderate; wire angle, 30°.

0	14.08	33.21	5.63	0.57	0	14.08	33.21	5.63	0.57	24.81	315.1	0.000
9	14.02	33.21	5.73	0.54	10	14.02	33.21	5.72	0.54	24.82	313.9	0.031
26	13.99	33.21	5.62	0.58	20	14.00	33.21	5.64	0.56	24.83	313.8	0.063
51	13.88	33.21	5.88	0.58	30	13.97	33.21	5.65	0.58	24.83	313.5	0.094
76	11.43	33.19	5.71	0.89	50	13.89	33.21	5.88	0.57	24.85	312.4	0.157
101	10.72	33.37	5.22	1.25	75	11.60	33.19	5.73	0.88	25.28	271.7	0.230
149	8.83	33.76	5.53	1.79	100	10.75	33.37	5.22	1.25	25.57	244.4	0.294
198	8.04	33.96	3.23	2.15	150	8.82	33.77	5.53	1.80	26.20	184.9	0.402
296	7.00	34.07	1.96	2.59	200	8.02	33.97	3.20	2.16	26.48	159.1	0.487
389	6.14	34.11	1.99r	2.90	250	7.45	34.03	2.45	2.41	26.61	147.4	0.564
489	5.22	34.15	2.04r	3.12	300	6.99	34.07	(1.95)	2.60	26.71	138.8	0.636
586	5.04	34.27	0.46	3.26	400	6.02	34.11	(1.17)	2.92	26.87	124.4	0.767
792	4.34	34.42	0.37	3.30	500	5.19	34.16	(0.68)	3.14	27.01	111.5	0.885
995	3.82	34.46	0.59	3.20	600	5.00	34.29	0.45	3.26	27.13	100.6	0.991
1201	3.34	-	-	-	700	4.73	34.38	0.39	3.29	27.24	91.7	1.087
					800	4.33	34.42	0.37	3.30	27.31	84.9	1.175
					1000	3.81	(34.46)	(0.58)	(3.19)	(27.40)	(77.5)	(1.338)

87.80 HORIZON; May 11, 1950; 1100 GCT; 32°19.5'N, 121°43'W; sounding, 2,380 fm; wind, 320°, force 3; weather, partly cloudy; sea, rough; wire angle, 33°.

0	14.41	33.01	5.93	0.52	0	14.41	33.01	5.93	0.52	24.59	336.1	0.000
9	14.26	32.97	5.79	0.52	10	14.25	32.97	5.78	0.52	24.59	336.1	0.034
26	14.10	33.01	5.86	0.53	20	14.13	32.99	5.81	0.53	24.63	332.5	0.067
51	14.07	33.04	5.62	0.55	30	14.10	33.02	5.86	0.53	24.66	330.0	0.100
76	13.87	33.01	5.94	0.56	50	14.08	33.04	5.63	0.55	24.68	328.6	0.166
101	11.49	32.99	5.74	0.81	75	13.88	33.01	5.94	0.56	24.70	327.5	0.248
210p	8.40	33.80	3.33	2.04	100	11.62	32.99	5.75	0.79	25.12	287.4	0.325
331p	7.18	34.00	1.84	2.57	150	9.30	33.17	4.70	1.55	25.66	236.6	0.455
454p	6.00	34.02	1.17	2.99	200	8.51	33.70	3.52	1.97	26.20	186.3	0.562
569p	5.32	34.13	0.65	3.10	250	7.96	33.93	2.70	2.24	26.46	162.0	0.649
799p	4.60	34.42	0.36	3.21	300	7.45	33.98	2.12	2.46	26.57	151.8	0.727
1008p	3.58	34.43	0.75	3.13	400	6.53	34.02	1.42	2.81	26.73	137.7	0.872
1211p	3.22	34.49	0.92	3.11	500	5.65	34.05	0.93	3.04	26.87	125.4	1.003
					600	5.20	34.18	0.58	3.12	27.02	111.2	1.122
					700	4.87	34.33	0.40	3.17	27.18	97.1	1.226
					800	4.60	34.42	0.36	3.21	27.28	88.2	1.319
					1000	3.60	34.43	0.73	3.14	27.40	77.3	1.484

HORIZON; May 11, 1950; 0624 GCT; 32°00'N, 122°25'W; sounding, 2,350 fm; wind, 320°, force 3; weather, overcast; sea, moderate; wire angle, 26°. 87.90

OBSERVED Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	INTERPOLATED Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	COMPUTED σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m
0	15.26	33.22	5.46	0.49	0	15.26	33.22	5.46	0.49	24.56	338.1	0.000
9	15.26	33.22	5.66	0.50	10	15.27	33.22	5.65	0.50	24.56	338.6	0.035
27	15.40	33.31	5.57	0.51	20	15.33	33.24	5.60	0.51	24.56	338.7	0.068
54	15.66	33.44	5.56	0.48	30	15.43	33.34	5.56	0.50	24.62	333.7	0.101
81	15.67	33.50	5.44	0.49	50	15.65	33.43	5.56	0.48	24.64	332.4	0.168
108	13.26	33.24	5.19	0.64	75	15.67	33.49	5.45	0.48	24.68	329.2	0.251
160	11.00	33.42	5.10	1.05	100	14.95	33.25	5.23	0.58	24.66	332.2	0.333
212	9.58	33.69	4.48	1.45	150	11.42	33.38	5.12	0.99	25.46	256.3	0.480
313	7.60	33.95	2.30	2.39	200	9.88	33.63	4.63	1.35	25.92	212.8	0.598
411	6.00	34.01	1.80	2.72	250	8.77	33.82	3.65	1.84	26.25	182.2	0.697
514	5.38	34.11	0.89	3.03	300	7.83	33.93	2.47	2.30	26.48	161.0	0.782
613	5.24	34.27	0.41	3.19	400	6.12	34.00	1.86	2.72	26.77	133.8	0.930
818	4.27	34.38	0.42	3.27	500	5.43	34.09	1.02	2.95	26.93	119.6	1.057
1023	3.70	34.42	1.03r	3.21	600	5.25	34.25	0.43	3.18	27.07	106.7	1.170
1230	3.30	34.51	0.86	3.18	700	4.90	34.36	0.41	3.22	27.20	95.3	1.270
					800	4.36	34.38	0.41	3.28	27.28	88.2	1.362
					1000	3.75	34.41	0.54	3.21	27.36	80.5	1.531

HORIZON; May 8, 1950; 2051 GCT; 33°24.5'N, 117°55'W; sounding, 370 fm; wind, 320°, force 2; weather, clear; sea, moderate; wire angle, 33°. 90.30

0	14.00	33.58	7.31r	0.42	0	14.00	33.58	(5.98)	0.42	25.11	286.1	0.000
9	13.20	33.54	7.01r	0.47	10	13.10	33.54	(5.95)	0.49	25.26	271.9	0.028
21	12.36	33.53	5.89	0.85	20	12.36	33.53	5.90	0.80	25.40	258.9	0.054
42	10.42	33.58	4.00	1.69	30	11.80	33.54	5.00	1.38	25.51	248.5	0.080
63	9.28	33.75	3.26	1.99	50	9.58	33.65	3.65	1.82	25.99	203.6	0.125
84	9.14	33.87	2.72	2.14	75	9.20	33.83	2.88	2.08	26.19	184.8	0.174
129	8.56	33.96	2.40	2.32	100	8.95	33.91	2.57	2.21	26.29	175.6	0.218
167	8.21	34.08	2.03	2.47	150	8.35	34.04	2.20	2.39	26.49	157.9	0.302
205	7.92	34.11	1.71	2.60	200	7.95	34.11	1.75	2.59	26.60	147.7	0.379
244	7.68	34.17	1.37	2.73	250	7.62	34.18	1.30	2.75	26.71	138.6	0.450
288	7.34	34.22	0.97	2.84	300	7.30	34.23	0.92	2.87	26.79	131.2	0.518
331	7.20	34.25	0.83	2.93	400	6.72	34.26	0.62	3.04	26.90	122.5	0.645
383	6.81	34.25	0.68	3.03								
427	6.65	34.29	0.55	3.06								

HORIZON; May 8, 1950; 1629 GCT; 33°11'N, 118°23.5'W; sounding, 680 fm; wind, direction missing, force 3; weather, clear; sea, slight; wire angle, 7°. 90.37

0	15.32	33.55	5.72	0.54	0	15.32	33.55	5.72	0.54	24.81	315.2	0.000
10	15.18	33.55	5.77	0.53	10	15.18	33.55	5.77	0.53	24.84	312.4	0.031
31	12.54	33.55	5.96	0.85	20	15.12	33.55	5.92	0.60	24.85	311.6	0.062
50	10.00	33.69	-	1.81	30	12.75	33.55	5.96	0.85	25.34	265.1	0.091
75	9.45	33.80	2.93	2.03	50	10.00	33.69	4.70	1.81	25.96	206.6	0.138
99	9.04	33.95	2.56	2.21	75	9.45	33.80	2.93	2.03	26.13	190.6	0.188
153	8.42	34.09	2.07	2.47	100	9.03	33.96	2.52	2.22	26.32	173.1	0.234
203	8.00	34.18	1.56	2.59	150	8.45	34.09	2.10	2.46	26.51	155.6	0.315
301	7.22	34.27	0.96	2.87	200	8.03	34.18	1.60	2.58	26.65	143.7	0.391
403	6.56	-	-	-	250	7.61	34.24	1.22	2.71	26.76	134.0	0.460
501	5.89	34.31	0.37	3.23	300	7.25	34.27	0.98	2.87	26.83	127.6	0.526
604	5.46	34.33	0.39	3.35	400	6.58	34.30	0.60	2.09	26.95	117.6	0.648
807	4.68	34.40	0.40	3.29	500	5.90	34.31	0.37	3.23	27.04	109.3	0.762
1004	4.20	34.45	0.43	3.32	600	5.47	34.33	0.39	3.35	27.11	103.5	0.868
1109	4.13	34.47	0.46	3.34	700	5.07	34.36	0.40	3.34	27.18	97.4	0.969
					800	4.70	34.40	0.40	3.30	27.26	90.9	1.063
					1000	4.20	34.45	0.42	3.32	27.35	83.0	1.237

SIO

CCOFI 5005

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
90.45	HORIZON; May 8, 1950; 1106 GCT; 32°56'N, 118°57'W; sounding, 950 fm; wind, 320°, force 2; weather, partly cloudy; sea, very rough; wire angle, 9°.											
0	13.56	33.60	5.98	0.83	0	13.56	33.60	5.98	0.83	25.22	276.1	0.000
10	13.55	33.62	5.81	0.78	10	13.55	33.62	5.81	0.78	25.23	274.7	0.027
25	13.00	33.73	5.61	0.97	20	13.25	33.69	5.67	0.88	25.35	264.0	0.054
54	9.21	33.86	2.80	2.07	30	12.60	33.76	5.47	1.14	25.53	246.8	0.080
79	8.94	33.93	2.48	2.18	50	9.27	33.85	2.90	2.02	26.20	184.0	0.123
109	8.56	34.04	2.15	2.32	75	8.97	33.92	2.50	2.16	26.30	174.7	0.168
163	8.10	34.11	1.74	2.52	100	8.70	34.00	2.25	2.27	26.40	165.1	0.210
217	7.60	34.20	1.24	2.76	150	8.20	34.10	1.80	2.47	26.56	151.2	0.289
324	6.95	34.25	0.69	2.95	200	7.75	34.17	1.45	2.68	26.68	140.4	0.362
437	6.34	34.29	0.48	3.08	250	7.35	34.23	1.00	2.84	26.78	131.1	0.430
545	5.80	34.34	0.37	3.19a)	300	7.05	34.25	0.76	2.92	26.84	126.3	0.495
652	5.35	34.36	0.31	3.23	400	6.53	34.27	0.52	3.03	26.93	119.2	0.617
862	4.34	34.47	0.41	3.34b)	500	6.02	34.32	0.43	3.16	27.03	110.1	0.732
1073	3.94	34.51	0.51	3.31	600	5.57	34.35	0.32	3.22	27.11	103.3	0.839
1273	3.80	34.51	0.59	3.26	700	5.10	34.38	0.34	3.26	27.19	96.3	0.938
					800	4.61	34.43	0.38	3.32	27.29	87.6	1.030
					1000	4.03	34.51	0.50	3.32	27.42	76.5	1.194
90.53	HORIZON; May 8, 1950; 0542 GCT; 32°35'N, 119°26'W; sounding, 280 fm; wind, 320°, force 5; weather, partly cloudy; sea, very rough; wire angle, 40°.											
0	12.71	33.57	5.46	0.88	0	12.71	33.57	5.46	0.88	25.36	262.1	0.000
8	12.70	33.56	5.38	0.87	10	12.71	33.56	5.40	0.87	25.36	263.1	0.026
20	12.70	33.55	5.79	0.90	20	12.70	33.55	5.79	0.90	25.35	263.9	0.052
39	12.50	33.57	5.72	0.98	30	12.60	33.56	5.76	0.93	25.38	261.6	0.079
58	11.41	33.58	5.24	1.39	50	12.32	33.58	5.48	1.24	25.45	255.4	0.131
77	9.72	33.64	3.68r	-	75	9.77	33.63	4.65	1.64	25.94	208.6	0.188
90p	-	33.69	4.01	1.82	100	9.27	33.75	3.77	1.93	26.12	192.3	0.239
177p	8.25	34.11	2.54	2.48	150	8.56	34.06	3.00	2.33	26.47	159.5	0.326
224p	7.60	34.14	1.48	2.67	200	7.95	34.12	2.03	2.58	26.61	147.0	0.404
276p	7.10	34.22	0.94	2.86	250	7.33	34.20	1.17	2.77	26.76	133.1	0.473
327p	6.82	34.23	0.73	2.91	300	6.96	34.23	0.80	2.89	26.84	126.5	0.539
385p	6.52	34.27	0.53	2.99								
90.60	HORIZON; May 8, 1950; 0054 GCT; 32°25'N, 119°56'W; sounding, 825 fm; wind, 340°, force 5; weather, partly cloudy; sea, high; wire angle, 46°.											
0	12.75	33.60	5.55	0.79	0	12.75	33.60	5.55	0.79	25.38	260.8	0.000
8	12.74	33.58	5.62	0.82	10	12.74	33.58	5.63	0.83	25.36	262.2	0.026
22	12.70	33.60	5.57	0.85	20	12.70	33.60	5.58	0.85	25.39	260.2	0.052
42	12.65	33.57	5.56	0.84	30	12.68	33.60	5.56	0.85	25.39	260.1	0.078
63	11.44	33.46	5.03	0.93	50	12.65	33.49	5.50	0.85	25.31	268.1	0.131
84	10.16	33.46	4.52	1.37	75	10.50	33.46	4.70	1.20	25.69	233.0	0.194
121	9.29	33.64	3.62	1.78	100	9.77	33.51	4.20	1.60	25.85	217.9	0.250
153	8.47	33.82	3.05	1.98	150	8.50	33.80	3.10	1.96	26.28	177.9	0.349
210	7.78	34.05	2.64	2.15	200	7.89	33.98	2.70	2.13	26.51	156.5	0.432
269	7.22	34.11	1.65	2.49	250	7.39	34.08	2.21	2.35	26.66	142.8	0.508
333	7.05	34.22	0.93	2.78	300	7.12	34.17	1.17	2.68	26.77	133.2	0.576
393	6.42	34.25	0.58	2.92	400	6.35	34.25	0.56	2.94	26.94	118.3	0.702
520	5.75	34.33	0.33	3.04	500	5.82	34.31	0.35	3.03	27.05	108.2	0.815
669	5.05	34.40	0.32	3.12	600	5.35	34.38	0.32	3.09	27.16	98.3	0.918
847	4.47	34.43	0.48	3.10	700	4.92	34.40	0.34	3.12	27.23	92.6	1.014
					800	4.60	34.42	0.42	3.11	27.28	88.2	1.105
					1000	(4.07)	(34.50)			(27.40)	(77.7)	(1.271)

a) Alternate value, 3.09 μg at/L, not used in interpolation.
b) Alternate value, 3.25 μg at/L, not used in interpolation.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
HORIZON; May 7, 1950; 1739 GCT; 32°04.5'N, 120°39'W; sounding, 2,240 fm; wind, direction missing, force 7; weather, partly cloudy; sea, very high; wire angle, 51°.													90.70
0	14.15	33.30	5.47	0.50	0	14.15	33.30	5.47	0.50	24.86	309.6	0.000	
12	14.17	33.31	6.00	0.52	10	14.17	33.31	6.00	0.51	24.87	309.8	0.031	
24	14.15	33.15	5.79	0.55	20	14.16	33.25	5.90	0.54	24.82	314.0	0.062	
49	13.18	33.09	5.93	0.60	30	14.00	33.12	5.75	0.56	24.76	320.7	0.094	
71	11.52	33.10	5.74	0.75	50	13.17	33.09	5.93	0.61	24.90	307.3	0.157	
96	10.30	33.22	5.55	1.04	75	11.42	33.11	5.71	0.80	25.25	274.5	0.229	
143	8.99	33.57	3.90	1.78	100	10.00	33.24	5.38	1.10	25.60	241.6	0.294	
189	8.58	33.89	3.90u	1.68u	150	8.90	33.66	(3.77)	(1.82)	26.11	194.2	0.403	
278	7.22	34.01	2.76	2.21	200	8.49	33.92	(3.30)	(2.01)	26.37	169.7	0.494	
375	6.70	34.18	0.97	2.81	250	7.54	33.99	(2.98)	(2.14)	26.57	151.6	0.574	
466	6.17	34.25	0.57	3.03	300	7.10	34.05	2.50	2.30	26.68	141.8	0.648	
562	5.64	34.34	0.36	3.09	400	6.58	34.20	0.80	2.92	26.87	125.1	0.781	
769	4.70	34.41	0.45	3.20	500	5.99	34.28	0.47	3.06	27.01	112.7	0.900	
1009	3.98	34.51	0.55	3.23	600	5.45	34.37	0.36	3.12	27.14	100.3	1.006	
1275	3.28	34.54	0.95	3.09	700	5.00	34.40	0.42	3.18	27.22	93.6	1.103	
					800	4.58	34.42	0.46	3.21	27.28	87.9	1.194	
					1000	3.99	34.50	0.55	3.23	27.41	76.7	1.358	
HORIZON; May 7, 1951; 0520 GCT; 31°27'N, 121°59'W; sounding, 2,300 fm; wind, 320°, force 5; weather, partly cloudy; sea, high; wire angle, 50°.													90.90
0	15.61	33.46	5.37	0.44	0	15.61	33.46	5.37	0.44	24.67	328.1	0.000	
11	15.62	33.46	5.62	0.44	10	15.62	33.46	5.62	0.44	24.67	328.4	0.033	
24	15.62	33.48	5.47	0.49	20	15.62	33.47	5.49	0.47	24.68	328.2	0.066	
49	15.63	33.46	5.47	0.46	30	15.63	33.48	5.46	0.48	24.68	327.7	0.098	
71	15.64	33.46	5.59	0.53	50	15.63	33.46	5.48	0.46	24.67	329.8	0.164	
95	15.12	33.44	5.72	0.50	75	15.64	33.46	5.61	0.54	24.67	330.7	0.247	
139	13.59	33.64	5.45	0.58	100	15.00	33.44	5.73	0.49	24.79	319.4	0.328	
184	10.67	33.53	4.64	1.18	150	12.87	33.62	5.30	0.66	25.37	265.2	0.474	
270	8.35	33.96	3.01	1.98	200	10.00	33.55	4.28	1.43	25.84	220.7	0.596	
361	7.00	34.06	1.89	2.10	250	8.71	33.89	3.33	1.89	26.32	176.2	0.695	
448	5.86	34.07	1.43	2.68	300	7.86	34.02	2.60	2.04	26.55	154.8	0.777	
541	5.19	34.15	0.77	2.94	400	6.45	34.07	1.60	2.30	26.78	133.0	0.921	
720	4.60	34.33	0.36	3.18	500	5.37	34.11	1.18	2.85	26.94	117.9	1.047	
909	4.12	34.43	0.42	3.29a)	600	4.90	34.22	0.55	3.03	27.09	105.0	1.158	
1142	3.53	34.51	0.73	3.13	700	4.63	34.32	0.38	3.16	27.20	95.0	1.258	
					800	4.43	34.38	0.36	3.24	27.27	89.1	1.350	
					1000	3.86	34.46	0.51	3.24	27.39	78.1	1.517	
HORIZON; May 6, 1950; 2214 GCT; 31°04.5'N, 122°40'W; sounding, 2,400 fm; wind, 360°, force 6; weather, cloudy; sea, high; wire angle, 48°.													90.100
0	15.98	33.63	5.55	0.41	0	15.98	33.63	5.55	0.41	24.72	323.2	0.000	
8	15.96	33.60	5.64	0.42	10	15.96	33.60	5.65	0.42	24.70	325.5	0.032	
21	15.95	33.64	5.59	0.43	20	15.95	33.64	5.60	0.43	24.73	322.6	0.065	
41	15.94	33.64	5.64	0.45	30	15.94	33.64	5.60	0.44	24.74	322.7	0.097	
61	15.93	33.66	5.40	0.48	50	15.93	33.65	5.57	0.47	24.75	322.3	0.162	
81	15.92	33.62	5.55	0.43	75	15.92	33.63	5.52	0.44	24.73	324.3	0.242	
121	15.00	33.61	5.72	0.45	100	15.88	33.61	5.63	0.40	24.73	325.6	0.324	
163	13.10	33.69	5.12	0.73	150	13.72	33.66	5.31	0.65	25.23	278.7	0.444	
244	9.16	33.91	4.40	1.53	200	10.92	33.80	4.73	1.00	25.88	217.8	0.598	
322	7.55	33.96	3.41	2.02	250	9.00	33.92	4.35	1.60	26.29	178.4	0.698	
404	6.84	34.13	1.34	2.73	300	7.89	33.96	3.80	2.10	26.49	159.6	0.782	
482	6.08	34.16	0.93	2.98	400	6.86	34.12	1.38	2.70	26.77	134.8	0.933	
649	5.08	34.32	0.38	3.22	500	5.93	34.17	0.87	3.02	26.92	120.1	1.057	
825	4.32	34.38	0.38	3.25	600	5.31	34.27	0.50	3.18	27.08	105.9	1.170	
1019	3.83	34.49	0.68	3.16	700	4.84	34.34	0.38	3.25	27.19	96.0	1.270	
					800	4.41	34.37	0.38	3.25	27.26	89.6	1.364	
					1000	3.86	34.48	0.63	3.18	27.41	76.7	1.530	

a) Alternate value, 3.15 μg at/L, not used in interpolation.

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

90.110 HORIZON; May 6, 1950; 1535 GCT; 30°46'N, 123°16'W; sounding, 2,350 fm; wind, 320°, force 6; weather, cloudy; sea, very rough; wire angle, 49°.

0	15.76	33.49	5.62	0.42	0	15.76	33.49	5.62	0.42	24.66	328.9	0.000
7	15.74	33.49	5.58	0.45	10	15.75	33.49	5.59	0.46	24.66	329.0	0.033
20	15.75	33.49	5.63	0.47	20	15.75	33.49	5.63	0.47	24.66	329.3	0.066
40	15.75	33.51	5.45	0.48	30	15.75	33.50	5.57	0.48	24.67	328.8	0.099
55	15.74	33.46	5.44	0.47	50	15.75	33.47	5.44	0.48	24.65	331.6	0.165
70	15.64	33.49	5.71	0.49	75	15.63	33.49	5.76	0.50	24.69	328.3	0.247
103	14.57	33.33	5.87	0.53	100	14.68	33.33	5.87	0.52	24.77	320.8	0.328
131	13.48	33.57	5.42	0.62	150	12.32	33.57	5.14	0.75	25.44	258.5	0.473
196	10.24	33.57	4.69	1.28	200	10.12	33.57	4.62	1.34	25.84	221.2	0.594
256	8.70	33.90	3.26	1.90	250	8.80	33.84	3.37	1.86	26.26	181.2	0.694
318	7.78	34.04	2.46	2.28	300	8.00	34.02	2.67	2.19	26.53	156.8	0.778
377	7.18	34.07	1.65	2.56	400	6.99	34.08	1.32	2.68	26.72	139.5	0.927
512	6.14	34.22	0.55	3.04	500	6.23	34.21	0.60	3.01	26.92	121.0	1.055
666	5.26	34.34	0.32	3.19	600	5.60	34.30	0.36	3.16	27.07	107.4	1.171
847	4.61	34.42	0.36	3.20	700	5.11	34.36	0.32	3.20	27.18	97.9	1.274
					800	4.75	34.40	0.34	3.20	27.25	91.5	1.369
					1000	(4.19)	(34.48)			(27.37)	(80.7)	(1.541)

90.120 HORIZON; May 6, 1950; 0754 GCT; 30°24.5'N, 124°01'W; sounding, 2,250 fm; wind, 350°, force 5; weather, overcast; sea, very rough; wire angle, 35°.

0	15.77	33.52	5.93	0.49	0	15.77	33.52	5.93	0.49	24.68	327.1	0.000
9	15.76	33.53	5.79	0.44	10	15.76	33.53	5.79	0.44	24.69	326.3	0.033
25	15.77	33.48	5.80	0.46	20	15.77	33.50	5.79	0.45	24.67	329.0	0.065
49	15.78	33.48	5.77	0.49	30	15.78	33.48	5.80	0.47	24.65	330.9	0.098
72	14.87	33.47	5.93	0.51	50	15.78	33.48	5.77	0.49	24.65	331.5	0.165
96	13.52	33.35	6.01	0.59	75	14.75	33.46	5.95	0.52	24.86	312.1	0.245
142	12.04	33.53	5.21	0.92	100	13.38	33.35	6.00	0.61	25.06	293.5	0.321
188	10.01	33.58	4.52	1.44	150	11.77	33.54	5.07	0.99	25.52	250.7	0.456
282	8.03	34.05	2.77	2.23	200	9.50	33.60	4.35	1.57	25.96	208.9	0.572
373	6.86	34.13	1.36	2.77	250	8.50	33.82	3.42	2.00	26.29	178.1	0.669
467	6.20	34.23	0.72	3.01	300	7.77	34.08	2.45	2.36	26.61	149.0	0.750
558	5.62	34.29	0.37	3.23	400	6.60	34.15	1.12	2.84	26.83	129.0	0.889
752	4.66	34.40	0.37	3.29	500	6.01	34.26	0.52	3.10	26.99	114.4	1.011
943	4.00	34.47	0.51	3.24	600	5.37	34.31	0.37	3.26	27.11	103.7	1.120
1141	3.54	34.51	0.82	3.11	700	4.89	34.37	0.37	3.29	27.21	94.4	1.219
					800	4.47	34.43	0.40	3.28	27.30	85.9	1.309
					1000	3.84	34.48	0.60	3.20	27.41	76.4	1.471

93.30 HORIZON; May 13, 1950; 0219 GCT; 32°50'N, 117°31.5'W; sounding, 480 fm; wind, 280°, force 2; weather, cloudy; sea, moderate; wire angle, 18°.

0	15.87	33.53	5.93	0.51	0	15.87	33.53	5.93	0.51	24.67	328.3	0.000
9	15.14	33.49	5.74	0.49	10	14.90	33.49	5.74	0.49	24.85	311.2	0.032
29	12.46	33.42	6.13	0.68	20	13.08	33.45	6.05	0.52	25.20	278.4	0.061
47	10.22	33.58	3.78	1.69	30	12.40	33.42	6.12	0.72	25.31	268.2	0.089
71	9.73	33.74	3.25	1.95	50	10.12	33.60	3.65	1.77	25.86	215.9	0.137
95	9.24	33.84	2.99	1.97	75	9.63	33.76	3.20	1.95	26.07	196.7	0.189
146	8.69	34.02	2.40	2.24	100	9.15	33.86	2.92	1.97	26.22	182.3	0.236
192	8.36	34.09	1.91	2.55	150	8.65	34.03	2.35	2.28	26.43	163.1	0.322
237	8.02	34.17	1.58	2.66	200	8.30	34.10	1.83	2.58	26.54	153.6	0.402
283	7.71	34.20	1.17	2.79	250	7.94	34.18	1.47	2.69	26.66	143.2	0.476
334	7.27	34.25	0.88	2.85	300	7.58	34.21	1.03	2.82	26.74	136.7	0.546
380	7.05	34.23	0.84	2.87	400	6.97	34.23	0.85	2.88	26.84	128.2	0.678
472	6.56	34.27	0.77	3.00	500	6.43	34.28	0.65	3.05	26.95	118.5	0.801
575	6.06	34.30	0.42	3.20	600	5.92	34.31	0.42	3.20	27.04	110.8	0.916
673	5.53	34.34	0.47	3.18								

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HORIZON; May 13, 1950; 0750 GCT; 32°30'N, 118°12.5'W; sounding, 950 fm; wind, 280°, force 2; weather, cloudy; sea, slight; wire angle, 0°. 93.40

OBSERVED					INTERPOLATED					COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m
0	15.38	33.53	5.82	0.52	0	15.38	33.53	5.82	0.52	24.78	317.9	0.000
10	15.37	33.58	5.92	0.45	10	15.37	33.58	5.92	0.45	24.81	314.6	0.032
25	14.90	33.55	6.02	0.47	20	14.95	33.55	6.02	0.45	24.89	308.1	0.063
55	9.97	33.64	4.05	1.68	30	13.50	33.56	5.97	0.84	25.20	278.6	0.092
80	9.26	33.73	3.32	1.88	50	10.30	33.62	4.30	1.57	25.84	217.4	0.142
110	9.06	33.91	2.71	2.06	75	9.35	33.71	3.44	1.85	26.07	196.1	0.193
165	8.26	34.02	2.06	2.34	100	9.11	33.84	2.87	2.01	26.21	183.2	0.241
219	7.82	34.18	1.39a)	2.72	150	8.45	34.00	2.20	2.27	26.44	162.3	0.327
327	7.23	34.23	0.76	2.95	200	7.93	34.11	1.60	2.59	26.61	147.4	0.405
441	6.42	34.23	0.55	3.08	250	7.64	34.21	1.15	2.81	26.73	136.7	0.475
549	5.83	34.34	0.39	-	300	7.39	34.23	0.85	2.91	26.78	132.5	0.542
658	5.24	34.33	0.33	3.22	400	6.70	34.23	0.57	3.04	26.87	124.5	0.671
869	4.44	34.42	0.43	3.26	500	6.08	34.28	0.45	3.12	27.00	113.9	0.790
1082	3.83	34.45	0.70	3.25	600	5.54	34.34	0.35	3.18	27.11	103.7	0.900
1285	3.38	34.52	0.90	3.18	700	5.06	34.34	0.33	3.23	27.17	98.7	1.000
					800	4.68	34.39	0.37	3.25	27.25	91.4	1.096
					1000	4.04	34.44	0.58	3.26	27.36	81.8	1.269

HORIZON; May 13, 1950; 1403 GCT; 32°07'N, 118°57'W; sounding, 800 fm; wind, 270°, force 4; weather, overcast; sea, moderate; wire angle, 23°. 93.50

0	13.82	33.44	5.97	0.67	0	13.82	33.44	5.97	0.67	25.04	292.9	0.000
10	13.75	33.46	5.65	0.68	10	13.75	33.46	5.65	0.68	25.07	290.3	0.029
23	13.48	33.48	5.90	0.67	20	13.48	33.48	5.89	0.67	25.14	283.9	0.058
50	11.18	33.46	4.91	0.77	30	13.40	33.48	5.83	0.68	25.16	282.6	0.086
73	9.78	33.57	4.10	1.10	50	11.18	33.46	4.91	0.77	25.57	244.0	0.139
101	9.15	33.86	2.97	1.34	75	9.70	33.61	4.00	1.12	25.94	208.9	0.195
150	8.48	34.00	2.16	2.00	100	9.16	33.85	3.00	1.32	26.21	183.2	0.244
199	7.86	34.07	1.94	2.17	150	8.48	34.00	2.16	2.00	26.44	162.8	0.331
295	7.18	34.18	0.92	2.48	200	7.86	34.07	1.92	2.17	26.59	149.4	0.409
396	6.54	34.29	0.62	3.00	250	7.45	34.13	1.45	2.32	26.69	139.9	0.481
492	6.03	34.31	0.54	3.12	300	7.15	34.18	0.89	2.50	26.77	132.8	0.550
589	5.56	34.34	0.38	3.16b)	400	6.52	34.29	0.60	3.01	26.95	117.6	0.674
785	4.72	34.40	0.46	3.18c)	500	5.99	34.31	0.53	3.12	27.03	110.5	0.788
987	4.14	34.40	0.79	3.06r	600	5.51	34.34	0.38	3.16	27.11	103.3	0.896
1187	3.56	34.51	0.79	3.24	700	5.07	34.38	0.40	3.18	27.20	95.9	0.996
					800	4.67	34.40	0.49	3.18	27.26	90.5	1.089
					1000	4.11	34.40	0.80	3.20	27.32	85.6	1.265

HORIZON; May 13, 1950; 2016 GCT; 31°49'N, 119°34'W; sounding, 1,100 fm; wind, 320°, force 3; weather, drizzle; sea, rough; wire angle, 30°. 93.60

0	13.50	33.34	6.20	0.75	0	13.50	33.34	6.20	0.75	25.03	293.8	0.000
9	13.48	33.35	5.93	0.72	10	13.48	33.35	5.93	0.72	25.04	293.1	0.029
22	13.38	33.45	6.13	0.70	20	13.38	33.45	6.12	0.69	25.14	284.1	0.058
47	12.87	33.46	5.96	1.30	30	13.27	33.45	6.10	0.86	25.16	282.3	0.086
68	11.45	33.40	5.49	1.64	50	12.77	33.46	5.90	1.35	25.27	272.6	0.142
92	10.41	33.51	4.76	2.08	75	11.05	33.40	5.32	1.75	25.54	246.7	0.207
136	8.68	33.87	2.96	2.35	100	10.12	33.60	4.17	2.14	25.86	216.9	0.265
179	8.24	34.00	2.47	2.50	150	8.49	33.92	2.79	2.41	26.37	168.8	0.361
266	7.33	34.14	1.48	2.88	200	8.03	34.04	2.23	2.56	26.54	154.1	0.442
356	6.63	34.22	0.87	3.06	250	7.53	34.12	1.65	2.79	26.67	141.8	0.516
444	6.20	34.31	0.49	3.08	300	7.00	34.18	1.22	3.02	26.79	130.8	0.584
532	5.74	34.34	0.35	3.20	400	6.40	34.26	0.65	3.07	26.94	118.2	0.708
713	4.95	34.40	0.36	3.24	500	5.91	34.34	0.37	3.16	27.06	107.2	0.821
732p	4.80	34.40	0.41	3.22	600	5.44	34.36	0.35	3.21	27.14	100.9	0.925
					700	5.00	34.40	0.35	3.24	27.22	93.6	1.022

a) Alternate value, 1.25 ml/L, not used in interpolation.
b) Alternate value, 3.29 μg at/L, not used in interpolation.
c) Alternate value, 3.28 μg at/L, not used in interpolation.

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	OBSERVED					INTERPOLATED					COMPUTED		
	Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
	m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
93.70	HORIZON; May 14, 1950; 0229 GCT; 31°28'N, 120°16'W; sounding, 2,150 fm; wind, 320°, force 5; weather, squally; sea, very rough; wire angle, 46°.												
	0	13.55	33.28	5.87	0.61	0	13.55	33.28	5.87	0.61	24.97	299.2	0.000
	11	13.60	33.26	6.00	0.65	10	13.60	33.26	6.00	0.64	24.95	302.0	0.030
	25	13.58	33.30	5.92	0.65	20	13.60	33.28	5.94	0.64	24.96	300.8	0.060
	53	12.94	33.34	5.95	0.72	30	13.00	33.31	5.92	0.65	25.11	287.4	0.090
	77	12.28	33.35	5.75	0.93	50	12.95	33.34	5.95	0.70	25.14	284.8	0.147
	105	12.03	33.42	5.60	1.03	75	12.33	33.35	5.76	0.90	25.27	273.1	0.216
	155	8.84	33.76	3.44	1.95	100	12.10	33.39	5.65	1.01	25.34	266.6	0.284
	205	8.18	33.98	2.88	2.22	150	9.03	33.72	3.55	1.89	26.13	191.8	0.399
	302	7.44	34.14	1.54	2.74	200	8.23	33.97	2.92	2.20	26.45	162.2	0.487
	403	6.46	34.23	1.24	2.89	250	7.82	34.07	2.27	2.43	26.59	149.6	0.564
	499	5.93	34.31	0.43	3.04	300	7.45	34.14	1.56	2.73	26.70	140.0	0.637
	601	5.45	34.38	0.35	3.13	400	6.50	34.22	1.25	2.89	26.89	122.5	0.769
	807	4.51	34.43	0.42	3.24a)	500	5.91	34.31	0.43	3.04	27.04	109.4	0.885
	1044	3.82	34.51	0.79	3.16	600	5.45	34.38	0.35	3.13	27.15	99.6	0.989
	1313	3.20	34.55	1.04	3.13	700	4.98	34.42	0.36	3.20	27.24	91.8	1.085
						800	4.53	34.43	0.42	3.24	27.30	86.6	1.174
						1000	3.93	34.49	0.70	3.17	27.41	76.8	1.337
93.80	HORIZON; May 14, 1950; 0842 GCT; 31°04'N, 120°59'W; sounding, 2,150 fm; wind, 330°, force 5; weather, overcast; sea, missing; wire angle, 50°.												
	0	14.16	33.19	5.72	0.55	0	14.16	33.19	5.72	0.55	24.78	317.7	0.000
	10	14.14	33.17	5.93	0.54	10	14.14	33.17	5.93	0.54	24.77	319.0	0.032
	23	14.07	33.13	5.83	0.54	20	14.07	33.13	5.85	0.54	24.75	321.1	0.064
	48	13.11	33.19	5.85	0.61	30	13.20	33.14	5.84	0.55	24.93	303.7	0.095
	71	11.93	33.08	5.89	0.75	50	13.07	33.19	5.86	0.63	25.00	298.0	0.155
	94	11.54	33.21	5.46	1.07	75	11.82	33.08	5.87	0.80	25.15	283.8	0.228
	130	10.61	33.58	4.85	1.49	100	11.45	33.24	5.34	1.16	25.35	266.0	0.297
	162	9.23	33.75	4.05	1.63	150	9.60	33.69	4.35	1.60	26.02	202.9	0.414
	222	8.20	34.05	1.89	2.44	200	8.47	33.96	2.42	2.25	26.41	166.5	0.506
	285	7.53	34.13	1.49	2.58	250	7.87	34.10	1.61	2.52	26.61	148.1	0.584
	345	6.47	34.09	1.49	2.66	300	7.25	34.12	1.49	2.60	26.71	138.7	0.657
	409	6.14	34.20	0.99	2.87	400	6.16	34.18	1.10	2.83	26.91	121.0	0.787
	535	5.76	34.39	0.36	3.11	500	5.88	34.35	0.42	3.07	27.08	106.1	0.900
	675	5.08	34.42	0.35	3.18	600	5.46	34.41	0.35	3.16	27.18	97.5	1.002
	878	4.39	34.49	0.48	3.20	700	4.98	34.42	0.35	3.18	27.24	91.8	1.096
						800	4.63	34.46	0.41	3.19	27.31	85.6	1.185
						1000	(4.02)	(34.50)			(27.41)	(77.1)	(1.347)
93.90	HORIZON; May 14, 1950; 1455 GCT; 30°37'N, 121°45'W; sounding, 2,550 fm; wind, 280°, force 4; weather, overcast; sea, very rough; wire angle, 40°.												
	0	14.48	33.10	5.31	0.58	0	14.48	33.10	5.31	0.58	24.64	330.7	0.000
	11	14.48	33.14	5.43	0.59	10	14.48	33.14	5.43	0.59	24.67	328.0	0.033
	27	14.47	33.13	5.48	0.59	20	14.47	33.14	5.47	0.59	24.67	328.3	0.066
	57	14.06	33.10	5.43	0.59	30	14.45	33.13	5.47	0.59	24.67	328.9	0.099
	84	13.43	33.25	5.49	0.68	50	14.18	33.10	5.43	0.59	24.70	326.2	0.164
	115	13.00	33.33	5.63	0.76	75	13.67	33.20	5.47	0.65	24.89	309.5	0.244
	170	10.20	33.35	4.71	1.32	100	13.18	33.30	5.59	0.70	25.06	293.3	0.319
	223	9.00	33.87	–	1.62	150	12.03	33.35	5.15	1.15	25.32	269.4	0.459
	332	7.59	34.04	2.47	2.38	200	9.34	33.57	(4.18)	1.51	25.97	208.6	0.580
	428	6.08	34.11	1.82	2.91	250	8.62	33.95	(3.37)	1.75	26.38	170.4	0.674
	537	5.80	34.26	0.54	3.03	300	7.99	34.01	(2.76)	2.09	26.52	157.4	0.756
	633	4.94	34.25	0.43	3.17	400	6.37	34.09	2.07	2.82	26.81	130.4	0.900
	840	4.28	34.38	0.48	3.25	500	5.85	34.23	0.77	3.01	26.98	114.6	1.022
	1059	3.73	34.47	0.71	3.18	600	5.31	34.25	0.45	3.13	27.07	107.4	1.133
	1322	3.14	34.52	–	–	700	4.63	34.27	0.43	3.20	27.16	98.7	1.236
						800	4.39	34.34	0.46	3.24	27.24	91.6	1.331
						1000	3.88	34.46	0.65	3.19	27.39	78.4	1.501

a) Alternate value, 3.11 μg at/L, not used in interpolation.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	µg at/L	m	°C	‰	ml/L	µg at/L	g/L	$10^5 cm^3/g$	dyn. m	

HORIZON; May 16, 1950; 0906 GCT; 32°11.5'N, 117°17'W; sounding, 700 fm; wind, 020°, force 2; weather, overcast; sea, slight; wire angle, 10°. 97.32

0	15.26	33.58	6.48	0.43	0	15.26	33.58	6.48	0.43	24.84	312.0	0.000	
10	14.30	33.57	6.48	0.42	10	14.30	33.57	6.48	0.42	25.04	293.1	0.030	
25	11.45	33.53	5.22	1.12	20	12.07	33.54	6.32	0.80	25.46	253.1	0.058	
49	9.95	33.71	3.45	1.75	30	10.95	33.53	4.50	1.29	25.66	234.5	0.082	
74	9.29	33.86	2.93	2.04	50	9.92	33.72	3.44	1.79	25.99	203.8	0.126	
98	8.88	34.00	2.67	2.11	75	9.23	33.87	3.93	2.05	26.22	182.4	0.174	
152	8.78	34.14	1.73	2.41	100	8.87	34.01	2.62	2.12	26.38	166.9	0.218	
201	8.78	34.27	1.09	2.66	150	8.78	34.14	1.75	2.40	26.50	156.7	0.298	
298	8.35	34.36	0.69	2.79	200	8.78	34.27	1.10	2.65	26.60	148.2	0.375	
401	7.12	34.31	0.63	2.94	250	8.65	34.34	0.82	2.74	26.68	142.0	0.447	
499	6.29	34.31	0.48	3.01	300	8.34	34.36	0.68	2.79	26.74	136.7	0.517	
602	5.75	34.33	0.38	3.06	400	7.15	34.31	0.63	2.94	26.88	124.8	0.648	
803	4.80	34.42	0.39	3.15a)	500	6.27	34.31	0.47	3.01	26.99	114.2	0.768	
1002	4.18	34.42	0.57	3.13	600	5.75	34.33	0.38	3.06	27.08	107.1	0.878	
1207	3.60	34.50	0.84	3.15	700	5.26	34.38	0.37	3.12	27.18	98.3	0.981	
					800	4.82	34.42	0.38	3.15	27.26	90.9	1.076	
					1000	4.20	34.42	0.55	3.13	27.33	85.2	1.251	

HORIZON; May 16, 1950; 0413 GCT; 31°56'N, 117°51'W; sounding, 850 fm; wind, missing; weather, overcast; sea, rough; wire angle, 14°. 97.40

0	15.21	33.49	5.50	0.55	0	15.21	33.49	5.50	0.55	24.79	317.1	0.000	
10	15.18	33.48	5.70	0.54	10	15.18	33.48	5.70	0.54	24.78	317.7	0.032	
24	14.32	33.44	6.02	0.60	20	14.95	33.44	6.00	0.58	24.80	316.1	0.063	
53	10.89	33.50	4.55	1.43	30	13.80	33.44	6.00	0.64	25.04	293.3	0.094	
77	9.57	33.58	3.47	1.85	50	11.55	33.48	4.77	1.31	25.51	248.9	0.148	
106	8.80	33.77	3.07	2.03	75	9.65	33.57	3.57	1.82	25.92	211.1	0.206	
159	8.24	33.93	2.57	2.29	100	8.92	33.74	3.13	2.00	26.17	187.7	0.255	
212	8.02	34.07	1.66	2.66	150	8.30	33.90	2.68	2.24	26.39	167.5	0.344	
316	7.22	34.14	0.87	2.82	200	8.06	34.04	1.90	2.59	26.53	154.5	0.424	
425	6.37	34.23	0.51	3.06	250	7.79	34.11	1.32	2.74	26.63	146.2	0.500	
530	5.82	34.27	0.36	3.20	300	7.38	34.13	0.98	2.80	26.70	139.7	0.571	
635	5.31	34.30	0.35	3.19	400	6.55	34.21	0.57	3.00	26.88	123.9	0.703	
841	4.56	34.35	0.48	3.24	500	5.96	34.26	0.38	3.19	26.99	113.8	0.822	
1048	3.92	34.42	0.67	3.15	600	5.47	34.29	0.35	3.20	27.08	106.5	0.932	
1247	3.46	34.45	0.89	3.22	700	5.05	34.32	0.37	3.21	27.15	100.1	1.035	
					800	4.70	34.34	0.43	3.24	27.21	95.3	1.133	
					1000	4.06	34.40	0.62	3.16	27.32	85.0	1.314	

HORIZON; May 15, 1950; 2200 GCT; 31°36'N, 118°32'W; sounding, 1,300 fm; wind, 320°, force 2; weather, overcast; sea, moderate; wire angle, 35°. 97.50

0	14.32	33.48	6.05	0.61	0	14.32	33.48	6.05	0.61	24.97	299.8	0.000	
8	14.04	33.48	6.09	0.59	10	14.03	33.48	6.08	0.59	25.03	294.3	0.030	
20	13.97	33.48	5.92	0.62	20	13.97	33.48	5.92	0.62	25.04	293.4	0.059	
41	13.12	33.40	5.92	0.80	30	13.92	33.44	5.90	0.65	25.02	295.6	0.088	
61	11.43	33.40	5.35	1.19	50	12.82	33.40	5.77	0.92	25.21	277.9	0.146	
80	10.60	33.51	4.52	1.45	75	10.80	33.45	4.77	1.42	25.62	238.8	0.210	
121	9.25	33.78	3.16	1.49	100	9.68	33.66	3.72	1.47	25.98	205.4	0.266	
156	8.89	33.96	2.56	1.63	150	8.93	33.93	2.67	1.59	26.31	174.7	0.361	
225	8.31	34.14	1.75	2.56	200	8.51	34.10	2.00	2.10	26.51	156.7	0.443	
296	7.52	34.18	1.24	2.86	250	8.07	34.16	1.52	2.71	26.62	146.6	0.520	
366	6.92	34.25	0.80	3.04	300	7.49	34.18	1.20	2.87	26.73	137.6	0.590	
441	6.42	34.33	0.58	3.11	400	6.69	34.29	0.70	3.08	26.92	119.9	0.719	
596	5.49	34.40	0.47	3.19	500	6.05	34.37	0.50	3.14	27.07	106.8	0.833	
763	4.74	34.43	0.43	3.28	600	5.47	34.40	0.47	3.19	27.17	98.3	0.935	
951	4.21	34.49	0.61	3.32	700	4.99	34.42	0.43	3.25	27.24	92.0	1.030	
					800	4.60	34.44	0.45	3.28	27.30	86.7	1.120	
					1000	(4.09)	(34.51)	(0.62)	(3.32)	(27.40)	(77.2)	(1.284)	

a) Alternate value, 3.29 µg at/L, not used in interpolation.

SIO

CCOFI
5005

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
97.60	HORIZON; May 15, 1950; 1547 GCT; 31°15.5'N, 119°10.5'W; sounding, 2,175 fm; wind, 320°, force 3; weather, overcast; sea, rough; wire angle, 12°.											
0	14.70	33.48	5.74	0.56	0	14.70	33.48	5.74	0.56	24.89	307.5	0.000
10	14.68	33.49	5.50	0.53	10	14.68	33.49	5.50	0.53	24.90	306.7	0.031
24	14.68	33.47	5.61	0.61	20	14.68	33.47	5.60	0.57	24.88	308.4	0.061
53	12.73	33.46	3.25r	0.87	30	14.68	33.47	(5.56)	0.65	24.88	308.7	0.092
78	10.86	33.48	4.30	1.45	50	12.76	33.46	(5.24)	0.90	25.27	272.4	0.150
107	9.68	33.78	3.11	2.02	75	11.80	33.48	(4.48)	1.40	25.47	253.9	0.216
161	8.98	33.99	2.48	2.30	100	9.83	33.59	3.28	1.91	25.90	213.0	0.275
215	8.52	34.13	1.80	2.52	150	9.10	33.96	2.57	2.26	26.31	175.1	0.372
322	7.54	34.18	1.39	2.80	200	8.62	34.09	1.97	2.45	26.49	159.1	0.455
432	6.82	34.25	-	-	250	8.19	34.16	1.62	2.63	26.61	148.4	0.532
537	5.94	34.32	0.47	3.08	300	7.72	34.18	1.45	2.75	26.69	140.9	0.604
642	5.32	34.38	0.31	3.13a)	400	7.01	34.23	1.15	2.93	26.83	128.7	0.739
850	4.40	34.45	0.49	3.26	500	6.27	34.30	0.65	3.04	26.99	114.9	0.861
1059	3.82	34.52	0.67	3.26	600	5.54	34.36	0.34	3.11	27.13	102.2	0.969
1261	3.42	34.52	0.91	3.25	700	5.02	34.40	0.33	3.16	27.22	93.8	1.067
					800	4.60	34.44	0.43	3.24	27.30	86.7	1.157
					1000	3.96	34.51	0.62	3.26	27.42	75.6	1.320
97.70	HORIZON; May 15, 1950; 0934 GCT; 30°55'N, 119°50.5'W; sounding, 2,100 fm; wind, 320°, force 2; weather, overcast; sea, rough; wire angle, 21°.											
0	14.88	33.49	5.70	0.58	0	14.88	33.49	5.70	0.58	24.86	310.3	0.000
9	14.86	33.50	5.71	0.52	10	14.86	33.50	5.71	0.52	24.87	309.6	0.031
27	14.88	34.49	5.78	0.59	20	14.87	33.49	5.74	0.56	24.86	310.8	0.062
55	14.38	34.48	5.80	0.61	30	14.88	33.49	5.80	0.59	24.85	311.5	0.093
83	11.77	34.40	5.46	0.99	50	14.43	33.49	5.80	0.60	24.95	302.7	0.154
111	10.14	34.49	4.38	1.63	75	13.00	33.41	5.60	0.87	25.18	281.2	0.228
168	8.70	34.93	2.71	2.26	100	10.60	33.43	4.92	1.36	25.64	237.4	0.292
223	7.77	34.00	2.77	2.33	150	9.06	33.85	2.76	2.19	26.23	182.6	0.398
333	6.73	34.15	1.12	2.94	200	8.12	33.98	2.75	2.29	26.48	159.8	0.483
439	6.06	34.23	0.62	3.19	250	7.45	34.03	2.38	2.40	26.61	147.4	0.560
550	5.53	34.31	0.40	3.27	300	6.99	34.10	1.53	2.67	26.73	136.6	0.631
656	5.01	34.34	0.39	3.35	400	6.28	34.21	0.72	3.11	26.91	120.3	0.759
880	4.26	34.43	0.55	3.32	500	5.76	34.27	0.46	3.24	27.03	110.4	0.875
1097	3.65	34.50	0.83	3.28	600	5.29	34.33	0.40	3.30	27.13	101.2	0.980
1309	3.16	34.52	1.05	3.26	700	4.84	34.35	0.41	3.35	27.20	95.3	1.079
					800	4.49	34.39	0.48	3.34	27.27	89.1	1.171
					1000	3.92	34.48	0.69	3.30	27.40	77.4	1.337
97.80	HORIZON; May 15, 1950; 0321 GCT; 30°35'N, 120°31'W; sounding, 2,100 fm; wind, 300°, force 4; weather, overcast; sea, rough; wire angle, 30°.											
0	15.04	33.44	5.57	0.56	0	15.04	33.44	5.57	0.56	24.78	317.7	0.000
13	15.04	33.46	5.55	0.57	10	15.04	33.45	5.56	0.56	24.79	317.2	0.032
29	15.00	33.48	5.45	0.60	20	15.01	33.47	5.50	0.58	24.81	315.2	0.063
65	11.54	33.44	5.13	1.08	30	14.99	33.48	5.44	0.60	24.82	314.3	0.095
95	9.96	33.55	3.94	1.61	50	12.17	33.46	5.33	0.81	25.38	261.5	0.152
130	9.09	33.78	3.11	1.97	75	11.00	33.45	4.75	1.30	25.59	242.2	0.215
194	8.14	34.04	2.19	2.32	100	9.77	33.59	3.80	1.67	25.91	212.0	0.272
257	7.37	34.10	1.72	2.51	150	8.77	33.90	2.77	2.09	26.31	174.5	0.369
384	6.19	34.14	0.99	2.86	200	8.06	34.05	2.15	2.34	26.54	153.8	0.450
507	5.64	34.29	0.43	3.14	250	7.46	34.10	1.76	2.49	26.67	142.3	0.525
628	5.02	34.34	0.40	3.23	300	6.93	34.11	1.47	2.63	26.75	135.0	0.594
759	4.61	34.40	0.43	3.20	400	6.08	34.15	0.90	2.90	26.89	122.2	0.722
1016	3.84	34.51	0.71	3.12	500	5.65	34.28	0.45	3.13	27.05	108.3	0.838
1286	3.14	34.54	1.01	3.11	600	5.18	34.34	0.40	3.22	27.15	99.1	0.941
1574	2.58	34.56	1.38	2.99	700	4.77	34.36	0.42	3.22	27.21	93.7	1.038
					800	4.50	34.42	0.47	3.19	27.29	87.0	1.128
					1000	3.89	34.50	0.70	3.13	27.42	75.6	1.291
					1200	3.35	34.53	0.90	3.11	27.50	68.7	1.435
					1500	2.72	34.56	1.28	3.02	27.58	61.2	1.630

a) Alternate value, 3.36 μg at/L, not used in interpolation.

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

HORIZON; May 14, 1950; 2108 GCT; 30°08'N, 121°13'W; sounding, 2,300 fm; wind, 320°, force 4; weather, cloudy; sea, very rough; wire angle, 32°. 97.90

0	15.16	33.46	5.65	0.52	0	15.16	33.46	5.65	0.52	24.77	318.7	0.000
8	15.08	33.44	5.80	0.53	10	15.07	33.44	5.80	0.53	24.78	318.3	0.032
25	15.00	33.46	5.75	0.52	20	15.01	33.45	5.76	0.52	24.80	316.6	0.064
51	14.37	33.46	5.78	0.53	30	14.99	33.46	5.76	0.52	24.81	315.8	0.095
76	11.76	33.44	5.60	1.04	50	14.45	33.46	5.78	0.53	24.92	305.3	0.157
100	10.48	33.44	4.83	1.44	75	11.85	33.44	5.60	1.02	25.43	257.8	0.228
148	8.88	33.77	3.58	1.94	100	10.48	33.44	4.83	1.44	25.67	234.9	0.289
195	8.36	34.00	2.59	2.28	150	8.86	33.79	3.52	1.96	26.21	184.0	0.394
285	7.18	34.13	1.55	-	200	8.31	34.01	2.52	(2.30)	26.47	160.4	0.480
373	6.50	34.20	0.90	2.90	250	7.70	34.09	1.89	(2.54)	26.62	146.4	0.556
466	5.96	34.25	0.57	3.03	300	7.02	34.14	1.40	(2.72)	26.76	134.0	0.627
558	5.49	34.33	0.43	3.09	400	6.32	34.22	0.80	2.94	26.92	120.1	0.754
750	4.64	34.40	0.48	3.23	500	5.78	34.28	0.49	3.06	27.03	110.0	0.869
947	3.99	34.33	0.64	3.21	600	5.25	34.36	0.43	3.12	27.16	98.5	0.973
1126	3.52	34.52	0.80	3.14	700	4.80	34.39	0.45	3.19	27.24	91.8	1.068
					800	4.47	34.41	0.52	3.23	27.29	87.3	1.158
					1000	3.83	34.48	0.68	3.19	27.41	76.3	1.322

CREST; May 16, 1950; 0156 GCT; 31°40'N, 116°46'W; sounding, 242 fm; wind, 320°, force 2; weather, overcast; sea, moderate; wire angle, 7°. 100.30

0	13.70	33.62	6.04	0.90	0	13.70	33.62	6.04	0.90	25.20	277.3	0.000
10	12.24	33.62	5.54	1.22	10	12.24	33.62	5.54	1.22	25.49	250.0	0.026
25	9.59	33.68	3.27	2.11	20	9.70	33.65	3.50	2.04	25.97	294.9	0.049
49	9.36	33.75	3.12	2.20	30	9.53	33.70	3.20	2.14	26.04	198.7	0.069
74	9.21	33.95	2.24	2.49	50	9.34	33.76	3.12	2.20	26.11	191.9	0.108
98	9.15	33.95	2.17	2.57	75	9.21	33.95	2.24	2.49	26.28	176.1	0.154
152	9.05	34.02	1.98	2.61	100	9.15	33.95	2.17	2.57	26.29	175.7	0.198
201	8.55	34.14	1.32	2.97	150	9.07	34.02	1.99	2.61	26.36	170.2	0.284
250	8.34	34.20	1.05	3.16	200	8.58	34.14	1.34	2.97	26.53	154.8	0.366
299	8.15	34.25	0.82	3.26	250	8.34	34.20	1.05	3.16	26.61	147.8	0.441
354	7.47	34.25	0.72	3.32	300	8.14	34.25	0.82	3.27	26.68	141.8	0.514
404	6.99	34.23	0.54	3.38	400	7.02	34.23	0.56	3.38	26.83	128.9	0.650

CREST; May 15, 1950; 2150 GCT; 31°27'N, 117°21'W; sounding, 500 fm; wind, 320°, force 4; weather, overcast; sea, rough; wire angle, 7°. 100.40

0	15.65	33.66	5.23	-	0	15.65	33.66	5.23		24.82	314.1	0.000
10	15.62	33.60	5.12	-	10	15.62	33.60	5.12		24.77	318.9	0.032
25	12.88	33.49	5.31	-	20	13.97	33.50	5.30		25.06	291.9	0.062
49	10.54	33.49	3.95	-	30	12.30	33.49	5.26		25.38	261.2	0.090
74	9.62	33.73	2.95	-	50	10.53	33.49	3.80		25.70	230.8	0.139
98	9.30	33.84	2.67	-	75	9.62	33.74	2.95		26.05	198.1	0.193
152	8.62	34.02	2.19	-	100	9.27	33.85	2.66		26.20	184.9	0.240
201	8.20	34.14	1.53	2.81	150	8.66	34.01	2.20		26.42	164.7	0.328
249	7.77	34.16	1.26	2.91	200	8.23	34.14	1.54	2.81	26.59	149.6	0.407
297	7.24	34.16	1.05	3.05	250	7.77	34.16	1.25	2.92	26.67	142.3	0.479
399	6.63	34.25	0.57	3.24	300	7.21	34.16	1.03	3.06	26.75	135.2	0.548
497	5.91	34.33	0.32	3.30	400	6.62	34.25	0.56	3.24	26.90	121.9	0.677
600	5.46	34.36	0.30	3.27	500	5.89	34.33	0.31	3.30	27.06	107.7	0.792
698	5.08	34.42	0.41u	3.30	600	5.46	34.36	0.30	3.27	27.13	101.3	0.896
802	4.66	34.40	0.42	3.37	700	5.06	34.42	0.35	3.30	27.23	92.8	0.993
					800	4.67	34.40	0.43	3.37	27.26	90.5	1.085

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5005

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

100.50 CREST; May 15, 1950; 1610 GCT; 31°07'N, 118°02'W; sounding, 875 fm; wind, 340°, force 3; weather, overcast; sea, very rough; wire angle, 10°.

0	14.83	33.47	5.84	0.46	0	14.83	33.47	5.84	0.46	24.85	310.7	0.000
10	14.86	33.46	5.44	0.48	10	14.86	33.46	5.44	0.48	24.84	312.5	0.031
25	14.73	33.48	5.73	0.50	20	14.77	33.47	5.70	0.50	24.86	310.2	0.062
54	11.96	33.40	5.49	0.91	30	14.68	33.48	5.72	0.51	24.89	307.9	0.093
78	10.89	33.57	3.54	1.74	50	12.23	33.41	5.55	0.74	25.33	266.3	0.151
107	10.01	33.71	3.03	2.00	75	11.01	33.55	3.72	1.66	25.67	235.0	0.213
160	9.10	33.91	2.56	2.25	100	10.22	33.68	3.04	1.96	25.91	212.7	0.269
213	8.33	34.05	2.17	2.45	150	9.25	33.88	2.65	2.22	26.22	183.4	0.368
318	7.24	34.19	1.19	2.97	200	8.51	34.02	2.25	2.39	26.45	162.6	0.454
428	6.58	34.25	0.63	3.18	250	7.87	34.12	1.85	2.64	26.62	146.7	0.532
534	5.89	34.29	0.50	3.31	300	7.37	34.18	1.37	2.90	26.74	135.9	0.606
639	5.38	34.33	0.32	3.34	400	6.75	34.24	0.72	3.14	26.88	124.4	0.733
847	4.46	34.40	0.52	3.33	500	6.09	34.28	0.51	3.27	26.99	114.0	0.852
1056	3.78	34.43	0.74	3.30	600	5.56	34.32	0.36	3.34	27.09	105.4	0.962
1256	3.30	34.51	0.98	3.30	700	5.10	34.35	0.36	3.34	27.17	98.5	1.063
					800	4.66	34.38	0.47	3.33	27.24	91.9	1.159
					1000	3.92	34.43	0.66	3.30	27.37	80.3	1.331

100.60 CREST; May 15, 1950; 1037 GCT; 30°45'N, 118°44'W; sounding, 1,500 fm; wind, 340°, force 4; weather, overcast; sea, very rough; wire angle, 5°.

0	15.36	33.66	5.44	0.41	0	15.36	33.66	5.44	0.41	24.88	308.2	0.000
10	15.37	33.60	5.39	0.42	10	15.37	33.60	5.39	0.42	24.83	313.1	0.031
25	15.35	33.51	5.47	0.44	20	15.36	33.53	5.45	0.44	24.78	318.1	0.063
55	11.95	33.35	5.20	0.88	30	15.33	33.48	5.47	0.46	24.75	321.4	0.095
79	10.47	33.54	3.86	1.64	50	13.00	33.36	5.27	0.70	25.14	284.2	0.155
108	9.87	33.67	3.32	1.81	75	10.59	33.50	4.07	1.60	25.70	231.6	0.220
162	8.87	33.98	2.46	2.19	100	10.03	33.65	3.40	1.77	25.91	211.8	0.275
216	8.28	34.46r	1.73	2.64	150	9.07	33.92	2.71	2.08	26.28	177.6	0.372
324	7.29	34.23	0.89	2.95	200	8.44	(34.09)	1.89	2.50	(26.51)	(156.4)	(0.456)
435	6.46	34.27	0.52	3.08	250	7.93	(34.16)	1.47	2.78	(26.65)	(144.6)	(0.531)
542	5.83	34.45	0.35	3.16	300	7.48	(34.21)	1.06	2.90	(26.75)	(135.2)	(0.601)
649	5.28	34.36	0.34	3.16	400	6.72	34.26	0.55	3.05	26.90	122.5	(0.730)
860	4.38	34.45	0.48	3.15	500	6.07	34.39	0.42	3.14	27.08	105.6	(0.844)
1071	3.76	34.47	0.66	3.13	600	5.51	34.40	0.34	3.16	27.16	98.8	(0.946)
1274	3.28	34.53	0.87	3.08	700	5.04	34.36	0.36	3.16	27.19	97.0	(1.044)
					800	4.62	34.41	0.43	3.16	27.27	89.2	(1.137)
					1000	3.91	34.47	0.59	3.14	27.39	78.7	(1.306)

100.70 CREST; May 15, 1950; 0440 GCT; 30°25'N, 119°24'W; sounding, 2,000 fm; wind, 340°, force 4; weather, overcast; sea, missing; wire angle, 26°.

0	15.30	33.41	5.51	0.44	0	15.30	33.41	5.51	0.44	24.70	325.0	0.000
9	15.32	33.46	5.73	0.40	10	15.31	33.46	5.72	0.40	24.74	321.9	0.032
22	15.12	33.44	5.68	0.46	20	15.15	33.45	5.70	0.45	24.77	319.6	0.064
44	13.35	33.34	5.96	0.57	30	15.09	33.41	5.71	0.51	24.75	321.5	0.097
67	12.22	33.40	5.59	0.81	50	13.00	33.35	5.96	0.63	25.14	285.0	0.157
89	10.31	33.46	5.14	1.05	75	11.63	33.42	5.46	0.91	25.45	255.3	0.225
136	10.80r	33.64	3.46	1.78	100	10.01	33.49	4.81	1.20	25.79	223.3	0.284
179	8.65	33.87	2.87	2.39	150	9.05	33.72	3.22	1.93	26.13	192.1	0.388
265	7.69	34.08	1.80	2.95	200	8.39	33.93	2.63	2.62	26.40	167.5	0.478
356	6.60	34.13	1.19	3.06	250	7.87	34.05	1.99	2.90	26.57	151.8	0.558
444	6.16	34.23	0.53	3.21	300	7.24	34.11	1.50	3.01	26.71	139.3	0.631
536	5.71	34.27	0.60	3.20	400	6.36	34.17	0.82	3.12	26.87	124.4	0.763
720	4.80	34.38	0.34	3.26	500	5.91	34.26	0.57	3.21	27.00	113.1	0.881
906	4.18	34.42	0.71r	3.26	600	5.37	34.30	0.53	3.22	27.10	104.5	0.990
1100	3.71	-	0.69	3.27	700	4.87	34.37	0.35	3.26	27.21	94.2	1.089
					800	4.52	34.41	0.38	3.26	27.28	88.0	1.180
					1000	3.91	(34.44)	0.55	3.26	(27.37)	(80.9)	(1.347)

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

CREST; May 14, 1950; 2310 GCT; 30°05'N, 120°04'W; sounding, 1,800 fm; wind, 340°, force 5; weather, overcast; sea, high; wire angle, 24°. 100.80

0	15.90	33.53	4.99	0.45	0	15.90	33.53	4.99	0.45	24.66	329.0	0.000
9	15.89	33.53	5.08	0.45	10	15.88	33.53	5.07	0.45	24.67	328.8	0.033
22	15.81	33.51	4.68	0.46	20	15.81	33.51	4.68	0.46	24.67	329.1	0.066
48	15.80	33.57	4.75	0.50	30	15.80	33.52	4.68	0.47	24.68	328.0	0.099
71	14.58	33.40	5.19	0.67	50	15.77	33.57	4.76	0.50	24.72	324.3	0.164
96	13.03	33.42	5.01	0.67	75	14.21	33.40	5.18	0.67	24.93	305.5	0.243
142	10.82	33.57	3.97	1.35	100	12.81	33.43	4.95	0.68	25.24	276.7	0.315
184	9.38	33.77	3.06	1.98	150	10.43	33.61	3.80	1.63	25.81	222.4	0.441
270	8.06	34.09	1.56	2.64	200	9.08	33.84	2.72	2.09	26.22	184.6	0.542
360	6.99	34.16	0.93	3.06	250	8.34	34.03	1.85	2.48	26.48	160.2	0.628
448	6.35	34.27	0.52	3.22	300	7.64	34.13	1.31	2.83	26.66	143.4	0.704
537	5.83	34.33	0.32	3.33	400	6.65	34.19	0.74	3.15	26.85	126.7	0.839
716	5.00	34.42	0.16	3.42	500	6.03	34.32	0.38	3.29	27.03	110.2	0.957
902	4.38	34.36r	0.52r	3.47	600	5.49	34.36	0.24	3.38	27.13	101.5	1.064
1091	3.68	34.49	0.68	3.58	700	5.07	34.42	0.18	3.42	27.23	93.0	1.160
					800	4.74	34.44	0.22	3.44	27.28	88.4	1.252
					1000	4.03	34.48	0.50	3.55	27.39	78.7	1.419

CREST; May 14, 1950; 1730 GCT; 29°43'N, 120°43'W; sounding, 2,100 fm; wind, 340°, force 5; weather, overcast; sea, high; wire angle, 18°. 100.90

0	15.92	33.57	5.59	0.43	0	15.92	33.57	5.59	0.43	24.69	326.5	0.000
10	15.95	33.57	5.51	0.41	10	15.95	33.57	5.51	0.41	24.68	327.4	0.033
24	15.94	33.57	5.38	0.45	20	15.95	33.57	5.40	0.44	24.68	327.7	0.065
53	14.90	33.51	5.68	0.43	30	15.94	33.57	5.39	0.45	24.68	328.0	0.098
77	-	33.46	5.66	0.61	50	15.10	33.52	5.67	0.44	24.83	314.2	0.162
106	11.82	33.53	4.94	0.93	75	13.49	33.46	5.68	0.57	25.12	286.9	0.238
159	9.40	33.75	3.28	1.98	100	12.17	33.51	5.27	0.89	25.42	259.0	0.306
212	4.67	33.98	2.96	2.12	150	9.58	33.72	3.40	1.90	26.04	200.4	0.421
319	7.49	34.14	1.32	2.15	200	8.82	33.93	3.04	2.11	26.33	174.0	0.514
431	6.65	34.27	0.65	3.13	250	8.23	34.04	2.52	2.15	26.51	157.8	0.597
537	5.90	34.33	0.38	3.26	300	7.64	34.12	1.65	2.15	26.66	144.2	0.673
644	5.42	34.38	0.31	3.31	400	6.88	34.24	0.78	2.87	26.86	126.2	0.808
852	4.46	34.45	0.46	3.30	500	6.14	34.31	0.43	3.24	27.01	112.4	0.928
1061	3.84	34.47	0.68	3.25u	600	5.62	34.36	0.35	3.30	27.12	103.2	1.035
1262	3.34	34.52	0.87	3.55r	700	5.16	34.40	0.30	3.31	27.20	95.6	1.135
					800	4.68	34.43	0.38	3.31	27.28	88.4	1.227
					1000	4.02	34.47	0.60		27.39	78.6	1.393

CREST; May 14, 1950; 1150 GCT; 29°23'N, 121°25'W; sounding, 2,180 fm; wind, 340°, force 5; weather, drizzle; sea, rough; wire angle, 21°. 100.100

0	14.83	33.39	5.47	0.41	0	14.83	33.39	5.47	0.41	24.79	317.0	0.000
10	14.81	33.37	5.49	0.40	10	14.81	33.37	5.49	0.40	24.77	318.5	0.032
28	14.81	33.42	5.46	0.41	20	14.81	33.40	5.47	0.40	24.80	316.4	0.064
56	13.24	33.45	5.47	0.61	30	14.80	33.42	5.46	0.41	24.82	314.8	0.095
84	-	33.51	5.38	0.93	50	13.50	33.44	5.48	0.55	25.11	287.9	0.155
111	11.42	33.55	4.80	1.14	75	12.65	33.49	5.44	0.83	25.31	268.7	0.225
164	9.17	33.73	3.98	1.64	100	11.86	33.54	5.10	1.06	25.50	251.2	0.290
214	8.15	34.04	2.40	2.41	150	9.59	33.68	4.26	1.48	26.01	203.5	0.404
311	6.94	34.04	2.11	2.79	200	8.38	34.02	2.52	2.30	26.47	160.7	0.495
406	5.94	34.11	1.09	3.02	250	7.69	34.04	2.28	2.63	26.59	150.0	0.572
507	5.60	34.25	0.52	3.25	300	7.10	34.04	2.16	2.77	26.67	142.5	0.645
606	5.11	34.54r	0.35	3.31	400	5.97	34.10	1.17	3.01	26.87	124.5	0.779
810	4.36	34.42	0.46	3.30	500	5.64	34.24	0.52	3.24	27.02	111.1	0.897
1014	3.82	34.46	0.67	3.23u	600	5.14	(34.34)	0.35	3.31	(27.16)	(98.6)	(1.002)
1219	3.36	34.52	0.93	3.33u	700	4.71	(34.39)	0.37	3.31	(27.25)	(90.7)	(1.096)
					800	4.37	(34.42)	0.45	3.30	(27.31)	(85.4)	(1.184)
					1000	3.86	34.46	0.65	3.30	27.40	77.4	(1.347)

SIO

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

100.110 CREST; May 14, 1950; 0610 GCT; 29°04'N, 122°02'W; sounding, 2,250 fm; wind, 340°, force 4; weather, drizzle; sea, rough; wire angle, 21°.

0	15.23	33.31	5.33	0.38	0	15.23	33.31	5.33	0.38	24.64	330.9	0.000
10	15.25	33.33	5.35	0.43	10	15.25	33.33	5.35	0.43	24.65	330.3	0.033
23	15.26	33.35	5.31	0.43	20	15.26	33.35	5.32	0.44	24.66	329.4	0.066
51	15.10	33.33	5.24	0.45	30	15.23	33.34	5.30	0.44	24.66	329.5	0.099
74	15.32	33.39	5.44	0.48	50	15.10	33.33	5.24	0.45	24.68	328.1	0.165
102	14.33	33.46	5.22	0.54	75	15.32	33.40	5.42	0.48	24.69	330.0	0.247
153	12.08	33.68	4.54	0.86	100	14.52	33.45	5.25	0.53	24.90	308.8	0.327
203	9.24	33.69	3.60	1.63	150	12.29	33.67	4.55	0.83	25.52	250.6	0.466
301	7.59	33.99	2.70	2.38	200	9.35	33.69	3.65	1.59	26.06	199.9	0.580
405	6.86	34.65r	0.97	2.89	250	8.13	33.83	3.00	2.05	26.36	171.9	0.672
505	6.12	34.20	0.57	3.12	300	7.60	33.99	2.71	2.38	26.56	153.2	0.753
605	5.34	34.27	0.43	3.17	400	6.91	34.12	1.03	2.87	26.76	135.5	0.898
804	4.58	34.43	0.43	3.26	500	6.18	34.20	0.60	3.11	26.92	121.1	1.026
1006	3.94	34.40r	0.77u	3.15u	600	5.37	34.27	0.43	3.17	27.08	106.7	1.140
1204	3.40	34.51	0.85	3.17	700	4.95	34.36	0.43	3.22	27.20	95.9	1.241
					800	4.59	34.43	0.43	3.26	27.29	87.3	1.333
					1000	3.94	34.48	0.59	3.22	27.40	77.6	1.498

100.120 CREST; May 14, 1950; 0030 GCT; 28°44'N, 122°38'W; sounding, 2,200 fm; wind, 340°, force 5; weather, cloudy; sea, rough; wire angle, 23°.

0	16.74	33.75	5.38	0.33	0	16.74	33.75	5.38	0.33	24.64	331.3	0.000
9	16.73	33.75	5.23	0.32	10	16.72	33.75	5.22	0.32	24.64	331.1	0.033
27	16.71	33.75	5.29	0.30	20	16.72	33.75	5.25	0.31	24.64	331.4	0.066
55	16.70	33.76	5.31	0.32	30	16.71	33.75	5.29	0.30	24.64	331.5	0.099
82	16.01	33.64	5.41	0.31	50	16.70	33.76	5.31	0.31	24.65	331.2	0.166
110	15.56	33.69	5.35	0.34	75	16.65	33.67	5.41	0.31	24.60	337.4	0.249
164	13.53	33.83	4.83	0.60	100	15.72	33.66	5.40	0.32	24.80	318.5	0.331
218	9.45	33.75	3.87	1.64	150	14.24	33.80	5.00	0.51	25.23	278.9	0.480
325	7.60	33.99	2.74	2.42	200	10.08	33.77	4.20	1.16	26.00	205.8	0.602
427	6.40	34.11	1.27	2.93	250	8.75	33.81	3.45	2.04	26.25	182.7	0.699
535	5.67	34.20	0.58	3.24	300	7.95	33.93	2.96	2.33	26.46	162.7	0.785
639	5.20	34.33	0.43	3.38	400	6.64	34.08	1.73	2.79	26.76	134.8	0.934
854	4.38	34.42	0.48	3.40	500	5.87	34.17	0.75	3.18	26.94	119.3	1.061
1065	3.78	34.45u	0.81u	3.33	600	5.39	34.27	0.45	3.34	27.07	106.9	1.174
1272	3.28	34.54	1.02	3.31a)	700	4.91	34.38	0.44	3.40	27.22	93.9	1.275
					800	4.54	34.41	0.45	3.40	27.28	88.2	1.366
					1000	3.94	34.45	0.58	3.39	27.38	79.8	1.534

105.35 CREST; May 3, 1950; 0854 GCT; 30°33'N, 116°39'W; sounding, 750 fm; wind, 300°, force 3; weather, cloudy; sea, moderate; wire angle, 25°.

0	15.12	33.57	5.34	0.40	0	15.12	33.57	5.34	0.40	24.86	309.8	0.000
9	15.09	33.53	5.76	0.40	10	15.09	33.53	5.76	0.40	24.84	312.4	0.031
22	15.09	-	5.69	0.45	20	15.09	(33.53)	5.70	0.45	(24.84)	(312.7)	(0.062)
45	12.86	-	5.89	0.60	30	15.04	(33.53)	5.74	0.50	(24.85)	(311.7)	(0.094)
67	10.50	33.58	3.90	1.69	50	12.30	(33.55)	5.80	0.67	(25.43)	(257.2)	(0.150)
88	9.79	33.71	3.38	2.03	75	10.16	33.61	3.72	1.88	25.86	216.3	(0.210)
134	8.82	-	2.69	2.26	100	9.49	33.81	3.17	2.12	26.13	191.3	(0.261)
174	8.33	34.11	2.11	2.59	150	8.62	34.05	2.45	2.35	26.45	161.1	(0.349)
257	7.35	34.18	1.30	2.89	200	8.02	34.15	1.76	2.75	26.62	145.8	(0.426)
346	6.93	-	0.85	3.07	250	7.40	34.18	1.35	2.88	26.74	135.5	(0.496)
432	6.70	34.31	0.50	3.25	300	7.08	34.20	1.07	2.97	26.80	130.4	(0.562)
523	6.08	34.31	0.48	3.35	400	6.82	34.29	0.60	3.19	26.91	121.7	(0.688)
708	5.15	34.52	0.33	3.47	500	6.24	34.31	0.46	3.34	27.00	113.8	(0.805)
893	4.44	34.36r	0.58	3.49	600	5.62	34.39	0.42	3.40	27.14	101.0	(0.914)
1090	3.88	34.52	0.68	3.41	700	5.18	34.51	0.34	3.46	27.29	87.7	(1.008)
					800	4.76	34.53	0.46	3.49	27.35	82.0	(1.093)
					1000	4.10	34.53	0.67	3.45	27.42	75.9	(1.250)

a) Alternate value, 3.51 μg at/L, not used in interpolation.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

CREST; May 11, 1950; 1528 GCT; 29°40'N, 116°03'W; sounding, 820 fm; wind, calm; weather, overcast; sea, moderate; wire angle, 0°. 110.35

0	13.36	33.55	5.72	0.41	0	13.36	33.55	5.72	0.41	25.22	275.9	0.000	
10	12.68	33.55	5.08	0.57	10	12.68	33.55	5.08	0.57	25.36	263.1	0.027	
25	10.95	33.53	3.69	1.13	20	11.35	33.53	3.73	0.98	25.59	241.1	0.052	
49	10.02	33.62	3.60	1.54	30	10.67	33.53	3.65	1.28	25.71	229.7	0.076	
74	9.50	33.71	3.03	-	50	9.97	33.62	3.59	1.55	25.90	212.0	0.120	
98	9.28	33.97	2.46	1.93	75	9.48	33.71	3.00	1.77	26.05	198.1	0.171	
152	8.57	34.07	2.08	2.12	100	9.25	33.98	2.45	1.94	26.30	175.0	0.218	
201	-	34.13	1.61	2.45	150	8.60	34.07	2.09	2.12	26.47	159.4	0.301	
299	7.95	34.27	0.55	2.86	200	8.27	34.10	1.65	2.43	26.55	153.1	0.380	
402	7.54	34.43	0.32	3.04	250	8.10	34.15	0.92	2.69	26.61	147.8	0.454	
500	6.53	34.34	0.33	3.07	300	7.94	34.27	0.54	2.86	26.73	137.4	0.526	
603	5.76	34.34	0.31	3.20	400	7.55	34.43	0.32	3.04	26.91	121.6	0.656	
806	4.93	34.42	0.34	3.20	500	6.33	34.34	0.33	3.07	27.01	112.7	0.773	
1004	4.28	34.42r	0.42	2.99r	600	5.78	34.34	0.32	3.20	27.08	106.8	0.883	
1209	3.66	34.56	0.61	3.26a	700	5.34	34.36	0.33	3.20	27.15	100.8	0.987	
					800	4.96	34.42	0.34	3.20	27.24	92.7	1.083	
					1000	4.30	34.49	0.42	3.22	27.37	81.3	1.257	

CREST; May 11, 1950; 1950 GCT; 29°29'N, 116°22'W; sounding, 1,100 fm; wind, 290°, force 2; weather, cloudy; sea, slight; wire angle, 22°. 110.40

0	15.52	33.55	5.36	0.37	0	15.52	33.55	5.36	0.37	24.76	319.6	0.000	
9	15.23	33.53	5.21	0.41	10	15.23	33.53	5.19	0.41	24.81	315.1	0.032	
23	15.19	33.53	5.08	0.48	20	15.20	33.53	5.08	0.47	24.82	314.7	0.063	
46	12.97	33.37	5.59	0.53	30	15.18	33.52	5.20	0.50	24.81	315.8	0.095	
69	11.73	33.49	5.07	0.84	50	12.45	33.38	5.57	0.56	25.27	272.5	0.154	
91	10.78	33.51	4.20	1.25	75	11.52	33.50	4.87	0.98	25.53	247.5	0.219	
136	9.19	33.84	2.86	1.84	100	10.25	33.55	3.97	1.40	25.80	223.0	0.277	
173	9.47r	34.07	2.24	-	150	(9.06)	33.98	2.59		(26.33)	(173.2)	(0.377)	
265	7.96	34.18	1.45	-	200	(8.60)	34.11	1.94		(26.50)	(157.4)	(0.459)	
356	7.11	34.25	0.82	-	250	(8.12)	34.17	1.64		(26.62)	(146.8)	(0.535)	
444	6.53	34.31	0.45	-	300	7.59	34.21	1.14		26.74	136.8	(0.606)	
537	5.99	34.34	0.40	-	400	6.81	34.28	0.63		26.90	122.4	(0.735)	
720	5.08	34.38	0.31	-	500	6.20	34.32	0.40		27.01	112.5	(0.853)	
904	4.37	34.42	0.50u	-	600	5.66	34.36	0.37		27.11	103.7	(0.961)	
1101	3.80	34.49	0.68	-	700	5.18	34.38	0.33		27.18	97.3	(1.061)	
					800	4.75	34.39	0.35		27.24	92.3	(1.156)	
					1000	4.09	34.45	0.53		27.36	81.6	(1.330)	

CREST; May 12, 1950; 0130 GCT; 29°16'N, 116°59'W; sounding, 1,970 fm; wind, 340°, force 3; weather, cloudy; sea, rough; wire angle, 1°. 110.50

0	15.70	33.42	4.97	0.46	0	15.70	33.42	4.97	0.46	24.62	332.7	0.000	
10	15.42	33.42	5.14	0.45	10	15.42	33.42	5.14	0.45	24.68	327.3	0.033	
25	15.19	33.40	-	0.46	20	15.26	33.40	5.15	0.46	24.70	325.5	0.066	
49	14.17	33.39	5.29	0.51	30	15.12	33.40	5.18	0.47	24.73	322.9	0.098	
73	12.75	33.37	5.43	0.63	50	14.03	33.39	5.29	0.51	24.96	302.0	0.160	
97	11.86	33.49	4.43	0.97	75	12.62	33.37	5.43	0.65	25.23	277.0	0.233	
150	9.70	33.64	3.93	1.54	100	11.78	33.50	4.39	1.00	25.49	252.7	0.299	
198	9.59	33.96	2.88	2.11	150	9.70	33.64	3.93	1.54	25.96	208.2	0.415	
294	8.34	34.25	1.05	2.75	200	9.59	33.98	2.82	2.13	26.24	182.3	0.512	
394	7.12	34.31	0.63	2.96	250	9.05	34.16	1.57	2.55	26.47	161.5	0.598	
490	6.92	34.38	0.35	3.11	300	8.22	34.25	1.02	2.76	26.67	143.0	0.674	
591	6.04	34.36	0.36	3.21	400	7.09	34.31	0.71	2.88	26.88	123.9	0.808	
790	4.81	34.42	0.38	3.27	500	6.87	34.38	0.35	3.13	26.97	117.2	0.928	
983	4.12	34.46	0.55	3.23	600	5.97	34.36	0.36	3.22	27.07	107.8	1.041	
1183	3.60	34.49	0.76	3.19	700	5.30	34.38	0.38	3.25	27.17	98.8	1.144	
					800	4.77	34.42	0.40	3.27	27.26	90.3	1.239	
					1000	4.07	34.47	0.55	3.22	27.38	79.9	1.409	

a) Alternate value, 3.08 μg at/L, not used in interpolation.

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

110.60 CREST; May 12, 1950; 0710 GCT; 28°55'N, 117°40'W; sounding, 1,850 fm; wind, 290°, force 1; weather, partly cloudy; sea, slight; wire angle, 0°.

0	16.85	33.66	5.11	0.38	0	16.85	33.66	5.11	0.38	24.54	340.3	0.000
10	16.50	33.68	5.30	0.38	10	16.50	33.68	5.30	0.38	24.64	331.4	0.034
25	16.45	33.68	5.08	0.38	20	16.46	33.68	5.11	0.38	24.65	330.8	0.067
50	16.35	33.87	5.22	0.39	30	16.43	33.69	5.07	0.38	24.66	329.7	0.100
74	15.76	33.59	5.39	0.40	50	16.35	33.87	5.22	0.39	24.82	315.4	0.164
99	14.16	33.48	5.26	0.49	75	15.62	33.58	5.36	0.40	24.76	321.5	0.244
153	10.31	33.58	3.81	1.46	100	14.02	33.48	5.25	0.50	25.03	296.5	0.321
203	-	33.96	2.69	2.10	150	10.37	33.57	3.87	1.42	25.79	224.3	0.451
301	8.28	34.18	1.26	2.69	200	9.25	33.94	2.71	2.06	26.27	179.9	0.553
404	7.45	34.30	0.58	2.93	250	8.70	34.10	2.00	2.45	26.48	160.5	0.637
502	6.22	34.29	0.42	3.10	300	8.28	34.18	1.28	2.69	26.61	149.1	0.715
605	5.87	34.38	0.26	3.21	400	7.50	34.30	0.59	2.92	26.82	130.5	0.854
806	4.86	34.40	0.37	3.23	500	6.24	34.29	0.43	3.09	26.98	115.2	0.977
1002	4.09	34.45	0.56	3.20	600	5.89	34.37	0.27	3.20	27.09	106.0	1.088
1205	3.60	34.51	0.81	3.19	700	5.41	34.40	0.30	3.23	27.17	98.8	1.190
					800	4.89	34.40	0.37	3.23	27.23	93.2	1.286
					1000	4.10	34.45	0.57	3.22	27.36	81.8	1.461

110.70 CREST; May 12, 1950; 1250 GCT; 28°33'N, 118°24'W; sounding, 1,900 fm; wind, 320°, force 4; weather, overcast; sea, rough; wire angle, 4°.

0	16.5	33.60	5.14	0.47	0	16.5	33.60	5.14	0.47	24.58	336.9	0.000
10	16.44	33.55	5.37	0.46	10	16.44	33.55	5.37	0.46	24.55	339.5	0.034
25	16.49	33.55	5.66	0.43	20	16.49	33.55	5.61	0.43	24.54	340.9	0.068
50	16.27	33.57	5.38	0.46	30	16.46	33.55	5.65	0.44	24.55	340.6	0.102
74	16.12	33.55	5.57	0.46	50	16.27	33.57	5.38	0.46	24.60	335.8	0.170
98	13.77	33.30	5.76	0.56	75	16.11	33.55	5.58	0.46	24.63	334.3	0.253
151	10.48	33.49	4.23	1.40	100	13.70	33.30	5.76	0.60	24.96	303.4	0.333
199	9.16	33.87	3.02	2.06	150	10.53	33.48	4.33	1.40	25.70	233.6	0.467
295	8.14	34.16	1.71	2.71	200	9.14	33.89	3.00	2.07	26.25	181.9	0.572
396	7.14	34.22	0.92	2.97	250	8.63	34.08	2.25	2.54	26.48	160.9	0.657
493	6.67	34.33	0.32	3.11	300	8.10	34.17	1.67	2.72	26.63	147.2	0.733
595	5.94	34.34	0.39	3.21	400	7.11	34.22	0.87	2.98	26.81	130.8	0.873
795	4.86	34.41	0.28	3.22	500	6.65	34.33	0.32	3.12	26.96	117.8	0.997
991	4.12	34.42u	0.62u	3.16u	600	5.89	34.34	0.40	3.21	27.07	108.2	1.110
1195	3.54	34.49	0.77	3.17	700	5.29	34.37	0.34	3.22	27.16	99.4	1.214
					800	4.84	34.41	0.29	3.22	27.25	91.9	1.309
					1000	4.09	34.46	0.50	3.22	27.37	80.9	1.482

110.80 CREST; May 12, 1950; 1830 GCT; 28°17'N, 118°55'W; sounding, 2,000 fm; wind, 320°, force 3; weather, overcast; sea, moderate; wire angle, 14°.

0	16.36	33.59	4.95	0.42	0	16.36	33.59	4.95	0.42	24.60	334.8	0.000
10	16.36	33.60	4.97	0.41	10	16.36	33.60	4.97	0.41	24.61	334.4	0.033
24	16.36	33.58	4.96	0.46	20	16.37	33.59	4.97	0.45	24.60	335.4	0.067
48	16.36	33.60	4.91	0.40	30	16.36	33.58	4.95	0.45	24.59	336.2	0.100
72	16.31	33.87	4.93	0.43	50	16.36	33.61	4.91	0.40	24.62	334.4	0.168
96	14.72	33.88	4.83	0.45	75	16.31	33.87	4.91	0.44	24.83	315.3	0.249
147	10.93	33.51	4.18	1.26	100	14.20	33.88	4.80	0.46	25.30	270.9	0.322
193	-	33.78	3.35	1.74	150	(10.83)	33.51	4.12	1.34	(25.67)	(236.5)	(0.449)
281	7.86	34.07	1.83	2.43	200	(9.65)	33.85	3.23	1.78	(26.13)	(192.9)	(0.557)
376	6.74	34.16	1.09	2.85	250	(8.53)	34.00	2.29	2.18	(26.43)	(165.3)	(0.646)
468	6.44	34.25	0.47	2.98	300	7.50	34.09	1.65	2.55	26.65	144.4	(0.723)
565	5.83	34.33	0.34	3.09	400	6.64	34.18	0.93	2.90	26.84	127.3	(0.859)
756	4.83	34.38	0.34	3.20	500	6.24	34.28	0.39	3.01	26.97	116.0	(0.980)
948	4.26	34.42	0.56u	3.06u	600	5.60	34.34	0.33	3.11	27.10	104.4	(1.091)
1149	3.58	34.49	0.73	3.12	700	5.06	34.36	0.34	3.18	27.18	97.3	(1.191)
					800	4.66	34.39	0.37	3.20	27.24	92.6	(1.286)
					1000	4.05	34.44	0.55	3.17	27.35	82.6	(1.462)

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

CREST; May 13, 1950; 0010 GCT; 27°55'N, 119°35'W; sounding, 1,950 fm; wind, 320°, force 4; weather, overcast; sea, rough; wire angle, 22°. 110.90

0	16.24	33.54	5.03	0.35	0	16.24	33.54	5.03	0.35	24.59	335.6	0.000
10	16.24	33.49	5.36	0.39	10	16.24	33.49	5.36	0.39	24.55	339.8	0.034
23	16.12	33.57	5.21	0.41	20	16.14	33.56	5.27	0.41	24.63	332.6	0.067
45	16.10	33.51	5.21	0.44	30	16.11	33.55	5.21	0.42	24.63	332.9	0.101
68	15.34	33.48	5.32	0.43	50	16.10	33.50	5.23	0.44	24.59	336.9	0.168
90	14.18	33.44	5.43	0.54	75	14.85	33.47	5.36	0.44	24.85	313.4	0.249
138	11.92	33.77	5.42	0.88	100	13.77	33.46	5.45	0.60	25.07	293.0	0.325
181	9.68	33.50	3.30	1.82	150	11.12	33.66	5.22	1.05	25.73	230.4	0.455
266	8.04	33.98	2.62	2.36	200	9.12	33.56	3.14	1.98	25.99	205.9	0.565
356	7.26	34.14	1.33	2.87	250	8.20	33.91	2.76	2.28	26.41	167.0	0.658
443	6.23	34.16	0.72	3.09	300	7.75	34.05	2.20	2.53	26.59	150.9	0.737
535	5.62	34.22	0.49	3.16	400	6.74	34.15	0.93	3.02	26.81	130.9	0.878
718	4.90	34.33	0.39	3.24	500	5.80	34.20	0.55	3.14	26.97	116.1	1.002
902	4.27	34.39	0.57u	3.18	600	5.34	34.27	0.41	3.20	27.08	106.3	1.113
1098	3.63	34.47	0.69	3.13	700	4.97	34.32	0.39	3.24	27.16	99.1	1.216
					800	4.61	34.36	0.40	3.22	27.23	92.8	1.312
					1000	3.93	34.43	0.56	3.16	27.36	81.2	1.485

CREST; May 13, 1950; 0550 GCT; 27°38'N, 120°16'W; sounding, 2,100 fm; wind, 320°, force 4; weather, overcast; sea, missing; wire angle, 21°. 110.100

0	16.93	33.77	5.21	0.32	0	16.93	33.77	5.21	0.32	24.61	334.1	0.000
9	16.91	33.77	5.14	0.33	10	16.91	33.77	5.14	0.33	24.61	333.7	0.033
23	16.91	33.73	5.26	0.29	20	16.90	33.74	5.26	0.29	24.59	336.2	0.067
46	16.84	33.77	5.28	0.32	30	16.90	33.74	5.27	0.29	24.59	336.5	0.100
70	16.39	33.68	5.30	0.33	50	16.83	33.77	5.29	0.33	24.63	333.3	0.167
93	15.54	33.62	5.49	0.32	75	16.15	33.67	5.35	0.33	24.71	326.4	0.250
142	12.82	33.62	4.86	0.77	100	15.30	33.62	5.45	0.34	24.86	312.5	0.330
186	10.39	33.71	3.74	1.49	150	12.25	33.63	4.63	0.99	25.50	252.8	0.471
271	8.69	34.08	2.29	2.38	200	9.95	33.78	3.45	1.61	26.03	202.9	0.586
361	7.68	34.14	1.26	2.72	250	8.98	34.02	2.60	2.22	26.37	170.7	0.679
447	6.93	34.20	0.83	2.93	300	8.33	34.11	1.93	2.55	26.55	155.0	0.760
538	6.31	34.31	0.35	3.12	400	7.31	34.16	1.05	2.81	26.74	138.1	0.906
717	5.23	34.38	0.41	3.18	500	6.55	34.26	0.48	3.07	26.92	121.6	1.036
800p	4.72	34.38	0.47	3.12u	600	5.93	34.35	0.35	3.16	27.07	108.0	1.151
972p	4.08	34.45	0.63	3.28	700	5.34	34.38	0.41	3.18	27.17	99.3	1.255
					800	4.72	34.38	0.47	3.22	27.24	91.1	1.350
					1000	(4.03)	(34.45)	(0.66)	(3.28)	(27.37)	(80.9)	(1.522)

CREST; May 13, 1950; 1130 GCT; 27°22'N, 120°55'W; sounding, 1,900 fm; wind, 340°, force 5; weather, overcast; sea, rough; wire angle, 16°. 110.110

0	16.93	33.77	5.57	0.33	0	16.93	33.77	5.57	0.33	24.61	333.8	0.000
10	16.90	33.75	5.35	0.35	10	16.90	33.75	5.35	0.35	24.60	335.1	0.033
25	16.91	33.76	5.52	0.33	20	16.90	33.75	5.50	0.34	24.60	335.4	0.067
53	16.87	33.75	5.26	0.31	30	16.90	33.76	5.51	0.32	24.61	335.0	0.100
76	16.88	33.77	5.36	0.35	50	16.88	33.75	5.30	0.31	24.60	335.9	0.168
104	15.69	33.67	5.30	0.41	75	16.88	33.77	5.35	0.35	24.62	335.5	0.252
154	12.69	33.60	4.81	0.85	100	16.15	33.69	5.32	0.40	24.73	325.7	0.334
204	10.15	33.87	2.58	2.10	150	12.96	33.60	4.88	0.78	25.34	268.4	0.482
304	8.89	34.20	1.69	2.53	200	10.25	33.82	2.73	2.07	26.01	204.9	0.602
410	7.86	34.28	0.85	2.86	250	9.43	34.11	2.04	2.35	26.37	171.2	0.695
511	6.73	34.29	0.47	3.08	300	8.92	34.20	1.70	2.52	26.53	157.4	0.777
612	5.99	34.31	0.34	3.20	400	7.96	34.28	0.95	2.84	26.74	138.7	0.925
812	4.94	34.43	0.42	3.28	500	6.83	34.29	0.49	3.06	26.90	123.3	1.056
1015	4.13	34.45	0.61u	3.16u	600	6.08	34.30	0.35	3.19	27.01	113.7	1.175
1214	3.52	34.52	0.85	3.15	700	5.50	34.38	0.36	3.26	27.15	101.4	1.283
					800	4.99	34.42	0.42	3.28	27.24	93.0	1.380
					1000	4.18	34.45	0.58	3.24	27.38	80.7	1.554

SIO

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5005

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	$\delta \cdot$	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

113.35 CREST; May 11, 1950; 0956 GCT; 29°11'N, 115°41'W; sounding, 750 fm; wind, 320°, force 3; weather, partly cloudy; sea, moderate; wire angle, 21°.

0	14.40	33.53	5.59	0.47	0	14.40	33.53	5.59	0.47	24.99	297.8	0.000
10	14.40	33.53	5.51	0.46	10	14.40	33.53	5.51	0.46	24.99	298.1	0.030
23	13.80	33.48	5.51	0.56	20	13.89	33.49	5.51	0.56	25.06	291.1	0.059
46	13.49	33.46	5.52	0.56	30	13.65	33.47	5.52	0.56	25.10	288.1	0.088
69	11.18	33.49	4.71	1.21	50	13.46	33.46	5.48	0.56	25.13	285.7	0.146
91	10.54	33.93	3.90	1.55	75	10.93	33.69	4.45	1.32	25.79	223.3	0.209
139	9.34	33.91	2.70	2.63	100	10.36	33.93	3.75	2.00	26.08	196.5	0.262
181	-	34.18	1.59	2.55	150	(9.30)	33.94	2.32	2.62	(26.26)	(179.7)	(0.356)
265	9.13	34.42	0.58	2.83	200	(9.27)	34.28	1.26	2.59	(26.53)	(155.1)	(0.439)
354	8.20	34.42	0.43	3.01	250	(9.19)	34.40	0.69	2.79	(26.64)	(146.0)	(0.515)
441	7.46	34.42	0.31	3.15	300	8.80	34.42	0.48	2.91	26.72	139.3	(0.586)
533	6.74	34.38	0.31	3.21	400	7.78	34.42	0.37	3.09	26.87	125.7	(0.718)
716	5.32	34.42	0.31	3.30	500	7.00	34.39	0.30	3.19	26.96	118.2	(0.840)
900	4.64	34.42u	0.49u	3.25u	600	6.19	34.39	0.32	3.25	27.07	108.5	(0.954)
1095	3.94	34.49	0.61	3.43	700	5.40	34.41	0.33	3.30	27.18	97.9	(1.057)
					800	5.00	34.44	0.35	3.32	27.25	91.7	(1.152)
					1000	4.22	34.47	0.51	3.39	27.36	81.8	(1.326)

117.35 CREST; May 11, 1950; 0408 GCT; 28°37'N, 115°16'W; sounding, 104 fm; wind, 340°, force 1; weather, partly cloudy; sea, moderate; wire angle, 19°.

0	13.08	33.51	5.86	0.54	0	13.08	33.51	5.86	0.54	25.24	273.7	0.000
10	12.89	33.48	5.76	0.59	10	12.89	33.48	5.76	0.59	25.26	272.3	0.027
24	12.08	33.60	5.49	0.78	20	12.25	33.59	5.54	0.71	25.47	252.7	0.053
47	11.55	33.60	-	1.04	30	11.88	33.60	5.00	0.85	25.55	245.5	0.078
70	10.71	33.62	3.24	1.49	50	11.53	33.60	3.75	1.10	25.61	239.8	0.127
92	10.02	33.68	3.32u	1.74	75	10.33	33.63	3.10	1.58	25.85	217.7	0.184
138	9.67	34.22	1.67	2.45	100	9.92	33.72	2.60	1.85	25.99	204.8	0.237
180	9.55	34.34	0.76	3.14	150	9.62	34.18	1.37	2.65	26.40	167.0	0.330

120.35 CREST; May 10, 1950; 2307 GCT; 28°03'N, 114°54'W; sounding, 47 fm; wind, 260°, force 4; weather, partly cloudy; sea, slight; wire angle, 9°.

0	16.33	33.64	5.22	0.37	0	16.33	33.64	5.22	0.37	24.65	330.3	0.000
5	15.81	33.66	5.33	0.35	10	15.73	33.66	5.32	0.34	24.80	316.1	0.032
15	15.60	33.66	5.31	0.34	20	15.55	33.65	5.15	0.37	24.83	313.3	0.064
25	15.45	33.62	5.10	0.41	30	15.25	33.59	5.47	0.40	24.85	311.7	0.095
34	14.75	33.58	5.51	0.39	50	13.00	33.62	5.03	1.28	25.34	265.1	0.153
44	13.50	33.62	5.23	0.79	75		33.75	2.29	1.67			
54	12.56	33.62	4.94	1.46								
64	10.83	33.58	3.12	1.59								
75	8.68r	33.75	2.29	1.67								

120.45 CREST; May 9, 1950; 1957 GCT; 27°42'N, 115°32'W; sounding, 1,800 fm; wind, 340°, force 5; weather, overcast; sea, moderate; wire angle, 36°.

0	14.89	33.71	5.58	0.43	0	14.89	33.71	5.58	0.43	25.02	294.6	0.000
9	14.89	33.68	5.78	0.43	10	14.89	33.68	5.77	0.43	25.00	297.1	0.030
20	14.65	33.75	5.52	0.51	20	14.65	33.75	5.52	0.51	25.10	287.3	0.059
45	14.25	33.68	5.25	0.78	30	14.45	33.72	5.37	0.64	25.12	285.7	0.087
64	13.28	33.69	4.48	1.14	50	14.13	33.68	5.16	0.85	25.16	282.7	0.144
87	10.24	33.82	2.99	1.99	75	12.55	33.73	3.60	1.52	25.52	249.2	0.211
124	10.97	34.31	1.44	2.64	100	11.57	34.08	2.37	2.32	25.98	206.3	0.268
160	10.38	34.38	0.98	2.80	150	10.50	34.37	1.08	2.77	26.39	167.5	0.361
234	9.70	34.35	0.50	2.96	200	9.95	34.43	0.69	2.91	26.54	155.0	0.441
314	8.68	34.40	0.36	3.14	250	9.55	34.45	0.46	3.00	26.62	148.0	0.518
396	7.91	34.42	0.26	3.26	300	8.84	34.41	0.38	3.11	26.70	140.7	0.589
481	7.16	-	0.27	3.36	400	7.87	34.42	0.27	3.27	26.86	127.0	0.723
652	5.90	34.45	0.26	3.31	500	7.00	34.44	0.28	3.36	27.00	114.6	0.844
828	4.94	34.43u	0.46u	3.29u	600	6.21	34.45	0.28	3.33	27.11	104.4	0.954
1013	4.22	34.52	0.41	3.39	700	5.64	(34.46)	(0.29)	(3.32)	(27.19)	(97.3)	(1.054)
					800	5.10	(34.47)	(0.34)	(3.33)	(27.27)	(90.8)	(1.148)
					1000	4.25	(34.52)	(0.51)	(3.38)	(27.40)	(78.4)	(1.318)

CREST; May 9, 1950; 1602 GCT; 27°39'N, 115°53'W; sounding, 2,050 fm; wind, 340°, force 5; weather, cloudy; sea, rough; wire angle, 27°. 120.50

OBSERVED Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	INTERPOLATED Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	COMPUTED σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m
0	16.10	33.58	5.07	0.36	0	16.10	33.58	5.07	0.36	24.65	329.6	0.000
9	16.11	33.58	-	0.35	10	16.11	33.58	5.00	0.35	24.65	330.2	0.033
26	16.12	33.69	4.94	0.34	20	16.12	33.67	4.95	0.34	24.72	324.3	0.066
52	15.22	33.53	5.06	0.38	30	16.13	33.68	4.94	0.34	24.72	323.9	0.098
77	13.09	33.46	5.07	0.51	50	16.01	33.54	5.06	0.38	24.64	332.1	0.164
101	11.14	33.53	3.90	1.21	75	13.33	33.46	5.07	0.51	25.16	283.8	0.241
146	9.80	33.89	2.67	2.18	100	11.31	33.52	4.20	1.12	25.59	242.9	0.306
189	9.64	34.23	1.54	2.36	150	9.78	33.95	2.58	2.20	26.19	186.6	0.414
277	8.67	34.33	0.91	2.69	200	9.59	34.25	1.36	2.40	26.46	162.4	0.501
363	7.79	34.36	0.67	2.90	250	9.04	34.31	1.03	2.58	26.59	150.2	0.579
456	6.56	34.33	0.40	3.04	300	8.46	34.34	0.85	2.76	26.71	140.0	0.652
546	6.26	34.38	0.25	3.10	400	7.38	34.34	0.57	2.98	26.87	125.8	0.785
738	5.12	34.43	0.31	3.11	500	6.58	34.34	0.32	3.07	26.98	116.1	0.906
934	4.30	34.34r	0.57u	2.98u	600	5.91	34.41	0.25	3.10	27.12	103.3	1.016
1137	3.72	34.51	0.70	3.16a)	700	5.30	34.43	0.30	3.11	27.21	95.1	1.115
					800	4.80	34.44	0.35	3.11	27.28	89.2	1.207
					1000	4.08	34.48	0.50	3.13	27.39	79.3	1.375

CREST; May 9, 1950; 1002 GCT; 27°20'N, 116°33'W; sounding, 1,950 fm; wind, 350°, force 6; weather, partly cloudy; sea, very rough; wire angle, 23°. 120.60

0	15.79	33.55	5.54	0.39	0	15.79	33.55	5.54	0.39	24.70	325.0	0.000
9	15.78	33.55	5.44	0.39	10	15.78	33.55	5.43	0.39	24.70	325.2	0.032
27	15.75	33.56	5.17	0.33	20	15.76	33.56	5.21	0.34	24.72	324.2	0.065
54	13.76	33.33	-	0.40	30	15.75	33.56	(5.18)	0.33	24.72	324.5	0.097
80	12.50	33.47	5.18	0.76	50	14.75	33.34	(5.18)	0.38	24.77	320.2	0.162
106	10.92	33.55	4.12	1.42	75	12.72	33.38	(5.18)	0.63	25.21	278.1	0.237
156	9.60	33.91	2.91	2.08	100	11.20	33.52	4.55	1.34	25.61	241.0	0.302
207	8.99	34.11	2.12	2.33	150	9.71	33.89	3.01	2.03	26.15	190.0	0.410
310	8.62	34.45	0.54	2.85	200	9.04	34.08	2.26	2.30	26.41	166.3	0.498
408	7.12	34.31	0.74	2.96	250	8.80	34.27	1.17	2.61	26.60	149.5	0.577
512	6.11	34.31	0.42	3.08	300	8.68	34.45	0.56	2.82	26.76	135.3	0.648
612	5.48	34.36	0.38	3.15	400	7.25	34.32	0.74	2.96	26.87	125.4	0.779
820	4.65	34.45	0.32	3.15	500	6.20	34.31	0.48	3.07	27.00	113.2	0.898
1024	3.96	34.49	0.57	3.02u	600	5.55	34.34	0.39	3.14	27.11	103.8	1.007
1229	3.39	34.54	0.84	3.13	700	5.05	34.42	0.35	3.15	27.23	92.7	1.105
					800	4.71	34.45	0.33	3.15	27.29	87.3	1.195
					1000	4.20	34.49	0.50	3.14	27.38	80.0	1.362

CREST; May 9, 1950; 0402 GCT; 27°03'N, 117°07'W; sounding, 2,050 fm; wind, 340°, force 4; weather, partly cloudy; sea, rough; wire angle, 22°. 120.70

0	16.44	33.61	5.71	0.38	0	16.44	33.61	5.71	0.38	24.60	334.9	0.000
10	16.43	33.62	5.23	0.38	10	16.43	33.62	5.23	0.38	24.61	334.4	0.033
24	16.44	33.61	5.36	0.34	20	16.44	33.61	5.34	0.35	24.60	335.7	0.067
51	16.16	33.64	5.28	0.35	30	16.40	33.61	5.35	0.34	24.61	334.9	0.100
73	15.00	33.55	5.38	0.41	50	16.20	33.64	5.29	0.35	24.68	328.9	0.167
99	13.40	33.48	5.34	0.54	75	14.82	33.54	5.38	0.41	24.91	307.7	0.246
145	10.56	33.65	3.60	1.56	100	13.37	33.48	5.33	0.55	25.16	283.8	0.320
190	9.70	34.03	2.42	2.39	150	10.40	33.68	3.25	1.70	25.87	216.7	0.446
281	8.90	34.34	1.09	2.81	200	9.59	34.08	2.28	2.48	26.32	175.0	0.544
379	8.36	34.43	0.43	2.97	250	9.13	34.27	1.52	2.74	26.55	154.6	0.626
473	7.25	34.42	0.22	3.12	300	8.79	34.37	0.87	2.85	26.68	142.9	0.700
568	6.34	34.42	0.26	3.19	400	8.15	34.43	0.40	3.00	26.82	130.5	0.836
760	5.01	34.43	0.32	3.19	500	6.96	34.42	0.22	3.15	26.99	115.5	0.959
959	4.18	34.37u	0.60u	3.26u	600	6.10	34.42	0.29	3.19	27.10	105.1	1.070
1157	3.58	-	0.81	3.41	700	5.40	34.43	0.33	3.19	27.20	96.4	1.170
					800	4.82		0.35	3.20			
					1000	4.05		0.58	3.27			

a) Alternate value, 3.02 μg at/L, not used in interpolation.

SIO

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5005

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

120.80 CREST; May 8, 1950; 2202 GCT; 26°46'N, 117°53'W; sounding, 1,950 fm; wind, 340°, force 5; weather, partly cloudy; sea, very rough; wire angle, 27°.

0	16.50	33.46	5.41	0.37	0	16.50	33.46	5.41	0.37	24.47	347.1	0.000
9	16.40	33.46	5.30	0.34	10	16.40	33.46	5.31	0.34	24.49	345.2	0.035
22	16.30	33.46	5.44	0.35	20	16.32	33.46	5.43	0.35	24.51	343.8	0.069
49	15.94	33.42	5.60	0.33	30	16.20	33.45	5.46	0.35	24.53	342.2	0.103
71	14.05	33.33	5.88	0.32	50	15.94	33.41	5.62	0.33	24.56	340.1	0.172
97	13.22	33.46	5.42	0.47	75	13.85	33.33	5.88	0.32	24.95	303.5	0.252
144	10.94	33.57	4.34	1.41	100	12.95	33.47	5.36	0.52	25.24	276.5	0.324
191	9.24	33.77	3.51	1.89	150	10.60	33.59	4.22	1.50	25.77	226.7	0.450
284	8.65	34.22	1.64	2.48	200	9.16	33.80	3.36	1.96	26.17	188.8	0.554
381	7.42	34.27	0.80	2.87	250	8.89	34.12	2.36	2.30	26.47	161.9	0.642
473	6.70	34.36	0.38	3.09	300	8.49	34.24	1.44	2.56	26.62	147.8	0.719
568	6.23	34.40	0.26	3.18	400	7.23	34.28	0.70	2.92	26.84	128.1	0.857
749	5.07	34.43	0.29	3.23	500	6.55	34.38	0.33	3.12	27.01	112.8	0.977
937	4.32	34.45u	0.62u	3.11u	600	6.03	34.41	0.27	3.20	27.10	104.9	1.086
1125	3.76	34.54	0.66	3.14	700	5.34	34.42	0.30	3.23	27.20	96.4	1.187
					800	4.83	34.43	0.32	3.23	27.26	90.3	1.280
					1000	4.13	34.50	0.50	3.18	27.40	78.4	1.450

120.90 CREST; May 8, 1950; 1602 GCT; 26°24'N, 118°32'W; sounding, 2,150 fm; wind, 360°, force 5; weather, partly cloudy; sea, very rough; wire angle, 25°.

0	16.67	33.60		0.52	0	16.67	33.60		0.52	24.54	340.5	0.000
8	16.65	33.60		0.44	10	16.65	33.60		0.43	24.54	340.5	0.034
27	16.63	33.58		0.41	20	16.64	33.58		0.41	24.53	342.1	0.068
54	16.64	33.62		0.50	30	16.63	33.58		0.42	24.53	342.1	0.102
80	16.11	33.71		0.56	50	16.64	33.62		0.49	24.56	340.1	0.170
106	14.77	33.57		0.49	75	16.19	33.71		0.55	24.73	324.3	0.254
158	11.45	33.59		1.11	100	15.06	33.58		0.50	24.88	310.4	0.333
208	9.79	33.94		2.08	150	11.85	33.58		0.86	25.54	249.2	0.472
311	8.60	34.28		2.55	200	10.00	33.79		2.01	26.03	203.0	0.586
409	7.47	34.28		2.84	250	9.21	34.16		2.30	26.45	164.0	0.678
513	8.41	34.31		2.81	300	8.70	34.27		2.51	26.61	148.9	0.756
613	5.78	34.38		3.09	400	7.57	34.28		2.83	26.79	133.0	0.897
822	4.68	34.55r		3.13	500	6.60	34.30		2.82	26.94	119.4	1.023
1025	3.96	34.36r		3.06u	600	5.86	34.37		3.06	27.09	105.6	1.135
1225	3.50	34.52		3.13	700	5.26			3.13			
					800	4.78			3.13			
					1000	4.05			3.13			

120.100 CREST; May 8, 1950; 1002 GCT; 26°00'N, 119°07.5'W; sounding, 2,100 fm; wind, 360°, force 5; weather, cloudy; sea, rough; wire angle, 20°.

0	17.45	33.98	5.39	0.28	0	17.45	33.98	5.39	0.28	24.65	330.3	0.000
9	17.49	33.93	5.08	0.27	10	17.49	33.93	5.08	0.26	24.60	335.4	0.033
23	17.45	33.95	5.23	0.24	20	17.46	33.95	5.22	0.24	24.62	333.6	0.067
51	17.40	33.90	5.28	0.20	30	17.43	33.95	5.23	0.22	24.63	333.1	0.100
75	15.91	33.68	5.54	0.28	50	17.40	33.90	5.27	0.20	24.60	336.5	0.167
102	14.66	33.58	5.65	0.37	75	15.91	33.68	5.54	0.28	24.78	319.7	0.249
153	11.53	-	4.86	0.47	100	14.72	33.58	5.65	0.37	24.96	303.4	0.327
203	9.86	33.94	2.78	2.05	150	11.65	33.73	5.00	0.45	25.69	234.6	0.461
304	8.38	34.22	1.39	2.59	200	9.91	33.92	2.87	1.88	26.14	191.9	0.568
410	7.52	34.31	0.68	2.86	250	8.99	34.10	1.85	2.46	26.44	165.0	0.657
512	6.44	34.33	0.42	2.96	300	8.42	34.21	1.42	2.58	26.61	149.0	0.735
615	5.76	34.36	0.38	3.06	400	7.64	34.31	0.73	2.84	26.81	131.8	0.876
816	4.73	34.43	0.46	3.13	500	6.56	34.33	0.42	2.95	26.97	116.6	1.000
1021	4.04	34.45u	0.82u	2.99u	600	5.84	34.36	0.39	3.04	27.09	106.1	1.111
1221	3.46	34.54	0.85	3.11	700	5.27	34.39	0.41	3.10	27.18	97.7	1.213
					800	4.78	34.43	0.46	3.13	27.27	89.7	1.307
					1000	4.11	34.48	0.59	3.13	27.38	79.7	1.476

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

CREST; May 8, 1950; 0402 GCT; 25°38'N, 119°39'W; sounding, 1,975 fm; wind, 360°, force 4; weather, cloudy; sea, very rough; wire angle, 15°. 120.110

0	17.50	33.78	4.86	0.24	0	17.50	33.78	4.86	0.24	24.48	346.2	0.000	
10	17.50	-	4.81	0.24	10	17.50	33.78	4.81	0.24	24.48	346.5	0.035	
24	17.52	33.78	4.86	0.22	20	17.52	33.78	4.85	0.23	24.47	347.5	0.069	
53	17.47	33.77	5.06	0.25	30	17.52	33.78	4.92	0.22	24.48	347.6	0.104	
77	16.10	33.79	5.01	0.28	50	17.48	33.77	5.06	0.25	24.48	348.1	0.174	
105	13.22	33.64	4.68	0.64	75	16.25	33.79	5.03	0.28	24.78	319.8	0.257	
157	10.99	33.78	3.12	1.67	100	13.65	33.65	4.79	0.50	25.24	276.8	0.332	
209	10.32	34.33	1.44	2.45	150	11.09	33.74	3.37	1.58	25.80	224.0	0.456	
312	8.50	34.28	1.10	2.72	200	10.44	34.31	1.57	2.34	26.36	172.0	0.556	
420	7.40	34.33	0.58	2.99	250	9.55	34.32	1.25	2.61	26.52	157.6	0.638	
524	6.54	34.34	0.32	3.11	300	8.63	34.28	1.12	2.70	26.63	147.0	0.714	
629	5.80	34.34	0.40	3.13	400	7.57	34.31	0.69	2.95	26.82	130.7	0.853	
835	4.86	34.46	0.30	3.29	500	6.74	34.34	0.32	3.09	26.96	118.3	0.978	
1043	4.10	34.45u	0.58u	3.18u	600	5.96	34.34	0.39	3.13	27.06	109.1	1.091	
1244	3.50	34.54	0.85	3.22	700	5.42	34.38	0.40	3.18	27.16	100.4	1.196	
					800	4.99	34.45	0.32	3.26	27.26	90.8	1.292	
					1000	4.22	34.49	0.43	3.27	27.38	80.3	1.463	

CREST; May 4, 1950; 1248 GCT; 27°16'N, 114°54.5'W; sounding, 450 fm; wind, 310°, force 3; weather, partly cloudy; sea, moderate; wire angle, 30°. 123.40

0	13.12	33.57	5.63	0.70	0	13.12	33.57	5.63	0.70	25.28	269.8	0.000	
9	13.08	33.68	5.48	0.71	10	13.08	33.68	5.45	0.71	25.38	261.2	0.026	
22	12.14	33.64	4.82	1.09r	20	12.65	33.64	5.10	0.75	25.43	256.4	0.052	
44	11.05	-	3.81	1.03	30	11.70	33.67	4.49	0.82	25.63	237.1	0.077	
65	10.36	33.91	2.75	2.12	50	10.55	33.79	3.55	1.24	25.93	209.0	0.122	
86	10.74	34.22	1.30	2.66	75	10.44	33.99	2.10	2.44	26.11	192.9	0.172	
130	10.78	34.51	0.42	3.01	100	10.78	34.40	0.89	2.84	26.37	169.1	0.217	
167	10.57	34.52	0.22	3.06	150	10.70	34.52	0.29	3.04	26.48	159.9	0.299	
205	10.26	34.48	0.30	3.05	200	10.30	34.48	0.29	3.05	26.51	157.1	0.379	
244	9.83	34.52	0.27	3.02	250	9.75	34.52	0.28	3.02	26.64	146.1	0.454	
288	9.18	34.47	0.35	3.07	300	9.06	34.48	0.35	3.07	26.72	139.0	0.526	
328	8.82	34.51	0.32	3.05	400	8.19	34.44	0.27	3.24	26.83	130.3	0.660	
412	8.06	34.43	0.27	3.26	500	7.08	34.41	0.27	3.29	26.96	117.9	0.784	
505	7.04	34.41	0.27	3.29	600	6.08	34.42	0.29	3.39	27.11	104.8	0.896	
600	6.08	34.42	0.29	3.39									

CREST; May 4, 1950; 1809 GCT; 26°57'N, 115°31'W; sounding, 1,660 fm; wind, 340°, force 5; weather, cloudy; sea, very rough; wire angle, 40°. 123.50

0	15.62	-	5.73	0.45	0	15.62	(33.58)	5.73	0.45	(24.76)	(319.6)	(0.000)
8	15.59	-	5.54	0.50	10	15.58	(33.58)	5.54	0.49	(24.77)	(318.8)	(0.032)
24	15.50	33.58	5.56	0.44	20	15.51	(33.58)	5.55	0.44	(24.79)	(317.6)	(0.064)
46	15.01	-	-	0.46	30	15.45	33.57	5.52	0.44	24.79	317.4	(0.096)
69	13.43	33.51	5.18	0.73	50	14.82	33.50	5.39	0.47	24.88	309.9	(0.158)
91	11.76	33.49	4.46	1.22	75	13.00	33.49	5.05	0.90	25.24	275.3	(0.231)
134	9.90	34.00	2.86	2.01	100	10.62	33.51	4.10	1.43	25.70	231.9	(0.295)
177	9.84	34.20	1.62	2.62	150	9.90	34.12	2.35	2.32	26.30	176.0	(0.397)
263	8.46	-	0.98	2.89	200	9.25		1.36	2.74			
347	7.98	-	0.66	3.12	250	8.54		1.02	2.87			
436	7.30	34.51r	0.36	3.25	300	8.24		0.84	2.98			
523	6.48	34.65r	0.35	3.33	400	7.64		0.47	3.22			
705	5.34	34.63r	0.41	3.38	500	6.68		0.35	3.31			
892	4.56	34.49r	0.38u	3.38	600	5.85		0.37	3.36			
1092	3.83	34.63r	0.68	3.42	700	5.36		0.41	3.38			
					800	4.99		0.45	3.38			
					1000	4.11		0.60	3.40			

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5005

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

123.60 CREST; May 4, 1950; 0024 GCT; 26°37.5'N, 116°09.5'W; sounding, 1,960 fm; wind, 310°, force 6; weather, partly cloudy; sea, very rough; wire angle, 34°.

0	16.57		5.58	0.40	0	16.57		5.58	0.40			
9	16.58		5.52	0.39	10	16.58		5.52	0.39			
21	16.54		5.55	0.49	20	16.55		5.54	0.49			
46	15.79		5.78	0.47	30	16.52		5.66	0.48			
66	14.16		5.82	0.52	50	15.40		5.77	0.48			
90	13.08		5.50	0.73	75	13.75		5.76	0.57			
134	10.64		4.37	1.42	100	12.54		5.32	0.88			
178	9.45		2.94	2.20	150	9.95		3.82	1.73			
262	9.33		0.94	2.91	200	9.38		2.35	2.44			
353	8.46		0.53	3.14	250	9.34		1.10	2.84			
440	7.42		0.32	3.25	300	9.12		0.68	3.04			
528	6.69		0.33	3.39	400	7.78		0.42	3.19			
702	5.34		0.30	3.51	500	6.95		0.31	3.34			
879	4.52		0.56u	3.46u	600	6.08		0.32	3.46			
1064	3.84		0.62	3.53	700	5.36		0.30	3.51			
					800	4.82		0.34	3.53			
					1000	4.04		0.54	3.53			

127.40 CREST; May 5, 1950; 1815 GCT; 26°39'N, 114°33'W; sounding, 1,850 fm; wind, 320°, force 6; weather, cloudy; sea, high; wire angle, 41°.

0	16.19	33.78	5.50	0.36	0	16.19	33.78	5.50	0.36	24.78	317.2	0.000
8	16.19	33.57	5.38	0.39	10	16.19	(33.57)	5.38	0.38	(24.63)	(332.6)	(0.032)
23	16.17	-	5.46	0.37	20	16.17	(33.60)	5.43	0.37	(24.65)	(330.3)	(0.066)
46	14.97	34.25r	5.70	0.41	30	16.16	(33.63)	5.53	0.38	(24.68)	(328.2)	(0.099)
68	12.55	33.69	5.14	0.82	50	14.30	(33.67)	5.70	0.45	(25.12)	(286.9)	(0.160)
91	10.74	33.60	3.82	1.57	75	11.38	33.68	4.90	1.28	25.70	231.8	(0.225)
134	10.07	-	2.48	2.13	100	10.58	33.62	3.49	1.68	25.80	223.1	(0.282)
175	9.46	34.29	2.14	2.37	150	9.76	34.18	2.30	2.25	26.37	169.3	(0.380)
255	9.12	-	0.74	2.88	200	9.41	(34.30)	1.79	2.52	(26.52)	(155.8)	(0.461)
333	8.12	34.34	0.50	3.06	250	9.18	(34.30)	0.80	2.85	(26.56)	(153.2)	(0.539)
416	7.34	34.38	0.32	3.14	300	8.51	(34.31)	0.55	3.02	(26.68)	(143.0)	(0.612)
499	6.68	34.38	0.30	3.21	400	7.48	34.37	0.36	3.13	26.88	125.0	(0.746)
672	5.52	34.49	0.30	3.34	500	6.67	34.38	0.30	3.21	27.00	114.4	(0.866)
853	4.67	34.52	0.48u	3.25u	600	5.95	34.42	0.30	3.29	27.12	103.1	(0.975)
1046	3.96	34.54	0.58	3.39	700	5.39	34.50	0.30	3.35	27.25	91.1	(1.072)
					800	4.92	34.52	0.35	3.38	27.33	84.8	(1.160)
					1000	4.10	34.54	0.54	3.39	27.43	75.1	(1.320)

127.50 CREST; May 5, 1950; 1203 GCT; 26°23'N, 115°08.5'W; sounding, 1,650 fm; wind, 320°, force 7; weather, partly cloudy; sea, high; wire angle, 35°.

0	16.11	33.66	5.48	0.40	0	16.11	33.66	5.48	0.40	24.71	324.0	0.000
8	16.12	33.62	5.53	0.39	10	16.10	(33.62)	5.55	0.39	(24.68)	(327.0)	(0.032)
20	16.09	-	5.64	0.38	20	16.09	(33.62)	5.64	0.38	(24.69)	(327.1)	(0.065)
44	15.88	33.62	5.66	0.38	30	16.05	(33.62)	5.65	0.38	(24.70)	(326.5)	(0.098)
64	13.10	33.51	5.40	0.78	50	15.00	33.60	5.62	0.41	24.91	306.3	(0.161)
88	11.08	33.55	4.16	1.47	75	12.00	33.52	5.03	1.32	25.46	254.6	(0.231)
130	9.76	34.00	2.47	2.29	100	10.55	33.60	3.50	1.63	25.79	224.0	(0.291)
170	9.19	34.18	1.68	2.61	150	9.42	34.13	2.03	2.47	26.39	167.6	(0.389)
252	8.71	34.36	0.69	3.01	200	8.96	34.25	1.21	2.81	26.56	152.5	(0.469)
338	8.02	34.40	0.38	3.15	250	8.72	34.36	0.73	3.00	26.68	141.6	(0.543)
422	7.21	34.38	0.34	3.23	300	8.40	34.39	0.47	3.11	26.76	135.4	(0.612)
507	6.55	34.56	0.25	3.32	400	7.42	34.39	0.35	3.21	26.90	122.7	(0.741)
676	5.32	34.49	0.29	3.46	500	6.60	34.55	0.26	3.31	27.14	100.9	(0.852)
851	4.59	34.34r	0.59u	3.27u	600	5.81	34.50	0.25	3.42	27.20	95.3	(0.950)
1034	3.94	34.49	0.58	3.39	700	5.20	(34.49)	(0.31)	(3.46)	(27.27)	(89.4)	(1.043)
					800	4.78	(34.49)	(0.42)	(3.46)	(27.32)	(85.2)	(1.130)
					1000	4.05	(34.49)	(0.56)	(3.41)	(27.40)	(78.2)	(1.294)

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

CREST; May 5, 1950; 0548 GCT; 26°05'N, 115°48'W; sounding, 2,000 fm; wind, 320°, force 6; weather, cloudy; sea, rough; wire angle, 38°. 127.60

0	16.30	33.69	5.66	0.44	0	16.30	33.69	5.66	0.44	24.69	325.6	0.000
9	16.31	33.64	5.46	0.44	10	16.31	33.64	5.46	0.44	24.65	330.0	0.033
24	16.31	33.68	5.49	0.47	20	16.31	33.67	5.47	0.47	24.67	328.2	0.066
48	15.79	33.82	5.66	0.41	30	16.30	33.70	5.55	0.46	24.70	326.1	0.098
71	15.31	33.95	5.65	0.47	50	15.75	33.83	5.66	0.41	24.92	305.3	0.162
94	13.38	33.51	5.42	0.71	75	15.20	33.94	5.64	0.50	25.13	286.3	0.235
140	10.26	34.25	3.31	1.91	100	12.30	33.51	5.30	0.80	25.40	261.4	0.304
184	9.52	34.11	2.29	2.42	150	10.02	34.23	2.93	2.10	26.37	169.8	0.412
274	8.95	34.31	0.95	2.94	200	9.36	34.15	2.04	2.52	26.42	166.1	0.496
361	8.22	34.38	0.36	3.14	250	9.09	34.27	1.27	2.83	26.56	153.9	0.575
453	7.24	34.38	0.27	3.24	300	8.77	34.34	0.70	3.03	26.66	144.8	0.650
543	6.52	34.63	0.32	3.36	400	7.79	34.38	0.30	3.17	26.84	128.8	0.787
729	5.30	34.67	0.37	3.52	500	6.87	34.51	0.29	3.31	27.07	107.6	0.906
915	4.46	34.58	0.48	2.98r	600	6.15	34.66	0.35	3.43	27.29	88.0	1.003
1112	3.76	34.51	0.64	3.47	700	5.44	34.67	0.37	3.51	27.38	79.2	1.087
					800	4.96	34.64	0.40	3.52	27.42	76.4	1.164
					1000	4.13	34.54	0.52	3.49	27.43	75.5	1.316

CREST; May 6, 1950; 0036 GCT; 26°19'N, 113°48'W; sounding, 410 fm; wind, 310°, force 5; weather, partly cloudy; sea, moderate; wire angle, 32°. 130.35

0	14.52	33.57	5.82	0.39	0	14.52	33.57	5.82	0.39	24.99	297.5	0.000
8	14.43	33.57	5.86	0.41	10	14.35	33.56	5.86	0.42	25.02	294.9	0.030
21	13.85	33.50	5.81	0.43	20	13.95	33.50	5.84	0.43	25.06	291.6	0.059
42	12.39	-	4.69	1.10	30	13.35	33.52	5.47	0.47	25.20	278.7	0.087
64	11.47	33.68	3.69	1.52	50	12.06	33.61	4.23	1.36	25.52	248.5	0.140
84	10.58	33.96	2.40	2.11	75	10.65	33.78	3.10	1.72	25.91	211.9	0.198
130	11.04	34.60	0.62	2.74	100	10.65	34.24	1.45	2.48	26.27	178.5	0.246
166	10.81	34.56	0.35	2.91	150	10.91	34.59	0.42	2.89	26.49	158.3	0.331
204	10.62	34.56	0.35	2.88	200	10.67	34.56	0.35	2.88	26.51	157.5	0.410
245	9.98	34.56	0.26	2.89	250	9.92	34.56	0.27	2.90	26.64	146.0	0.486
286	9.60	34.56	0.27	2.99	300	9.45	34.55	0.26	3.00	26.71	140.1	0.557
331	9.08	34.49	0.25	3.00	400	8.12	34.49	0.22	3.07	26.88	125.6	0.689
422	7.90	34.49	0.22	3.11	500	7.31	34.47	0.22	3.29	26.98	116.8	0.811
511	7.20	34.45u	0.26u	3.16u	600	6.35	34.45	0.23	3.45	27.09	106.3	0.922
614	6.22	34.45	0.23	3.46								

CREST; May 6, 1950; 0453 GCT; 26°10'N, 114°08'W; sounding, 1,470 fm; wind, 300°, force 6; weather, clear; sea, very rough; wire angle, 36°. 130.40

0	15.28	33.57	5.53	0.43	0	15.28	33.57	5.53	0.43	24.83	312.9	0.000
8	15.27	-	5.80	0.47	10	15.26	(33.57)	5.80	0.47	(24.83)	(312.8)	(0.031)
24	15.10	-	5.65	0.42	20	15.16	(33.58)	5.66	0.42	(24.86)	(310.3)	(0.062)
48	13.90	33.60	5.84	0.55	30	14.94	(33.58)	5.66	0.42	(24.91)	(306.0)	(0.093)
71	12.30	-	4.59	1.15	50	13.80	33.60	5.83	0.56	25.17	282.1	(0.152)
94	11.44	33.93	3.26	1.71	75	12.15	33.73	4.15	1.27	25.60	241.9	(0.218)
134	10.16	34.18	2.15	2.35	100	11.21	33.99	3.10	1.82	25.97	206.6	(0.274)
174	10.07	-	1.29	2.69	150	10.10	(34.22)	1.76	2.52	(26.35)	(171.9)	(0.368)
254	9.76	34.45	0.42	2.97	200	10.01	(34.35)	0.88	2.82	(26.46)	(161.9)	(0.451)
332	8.76	-	0.30	3.07	250	9.78	(34.44)	0.44	2.96	(26.57)	(152.5)	(0.530)
415	7.80	35.09r	0.28	3.17	300	9.20	34.48	0.31	3.04	26.70	141.2	(0.603)
494	7.06	34.38	0.26	3.25	400	7.95	34.46	0.30	3.15	26.88	125.3	(0.737)
659	5.90	34.45	0.23	3.31	500	7.00	34.38	0.27	3.25	26.95	119.0	(0.859)
822	4.92	34.46	0.42u	3.30u	600	6.26	34.43	0.24	3.30	27.09	106.5	(0.972)
1015	4.11	-	0.48	3.38	700	5.64	34.45	(0.25)	(3.33)	27.18	98.1	(1.074)
					800	5.04	34.46	(0.30)	(3.35)	27.27	82.0	(1.164)
					1000	4.14	(34.52)	(0.47)	(3.38)	(27.41)	(77.3)	(1.324)

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OBSERVED					INTERPOLATED					COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m

130.50 CREST; May 6, 1950; 1126 GCT; 25°49'N, 114°45'W; sounding 1,950 fm; wind, 320°, force 5; weather, partly cloudy; sea, rough; wire angle, 31°.

0	16.84	33.80	5.58	0.34	0	16.84	33.80	5.58	0.34	24.65	329.6	0.000
9	16.82	33.98	5.39	0.38	10	16.82	33.98	5.40	0.38	24.80	316.1	0.032
21	16.82	33.75	5.58	0.28	20	16.82	33.80	5.57	0.28	24.66	329.6	0.064
47	15.67	33.66	5.63	0.35	30	16.80	33.72	5.61	0.29	24.60	335.7	0.098
68	14.31	33.51	5.70	0.40	50	15.53	33.65	5.64	0.36	24.84	313.8	0.163
92	13.06	34.14	2.77	1.72	75	13.75	33.51	5.65	0.43	25.11	288.3	0.238
136	12.44	34.40	0.96	2.49	100	12.94	34.21	2.01	2.06	25.81	222.0	0.302
178	11.73	34.49	0.72	2.64	150	12.20	34.45	0.87	2.56	26.14	191.7	0.406
265	10.20	34.51	0.38	2.82	200	11.33	34.50	0.60	2.70	26.35	173.5	0.496
357	8.88	34.49	0.38	2.93	250	10.44	34.51	0.40	2.80	26.51	158.4	0.579
446	7.76	34.49	0.24	2.99	300	9.64	34.50	0.38	2.87	26.64	146.8	0.656
536	6.68	34.44	0.21	3.13	400	8.35	34.49	0.34	2.96	26.84	129.1	0.794
715	5.49	34.44	0.26	3.22	500	7.08	34.46	0.21	3.07	27.00	114.2	0.916
900	4.56	34.48	0.42	3.03r	600	6.17	34.43	0.22	3.18	27.10	106.0	1.026
1090	3.90	34.60	0.60	3.21	700	5.55	34.44	0.26	3.22	27.19	98.4	1.128
					800	5.04	34.46	0.31	3.22	27.26	90.7	1.223
					1000	4.15	34.53	0.54	3.21	27.42	75.0	1.388

130.60 CREST; May 6, 1950; 1741 GCT; 25°28'N, 115°23'W; sounding, 2,000 fm; wind, 320°, force 5; weather, cloudy; sea, very rough; wire angle, 24°.

0	17.38	33.87	5.12	0.34	0	17.38	33.87	5.12	0.34	24.58	336.7	0.000
9	17.39	-	5.24	0.36	10	17.39	33.92	5.24	0.37	24.61	334.0	0.034
27	17.37	34.00	5.37	0.41	20	17.37	33.97	5.33	0.40	24.66	330.0	0.067
54	17.35	33.91	5.14	0.36	30	17.36	34.00	5.37	0.41	24.68	327.9	0.100
82	12.54	33.60	4.51	1.08	50	17.35	33.93	5.16	0.37	24.63	333.4	0.166
109	11.06	33.62	3.62	1.59	75	14.60	33.61	4.70	0.64	25.01	298.0	0.245
163	10.13	34.69r	2.16	2.24	100	11.35	33.61	3.92	1.50	25.65	237.0	0.312
218	9.64	34.23	1.44	2.52	150	10.31	33.71	2.40	2.10	25.91	213.0	0.424
326	9.68	34.43	0.18	2.95	200	9.68	34.15	1.67	2.45	26.36	171.2	0.520
431	7.99	34.45	0.24	2.89	250	9.62	34.32	0.82	2.67	26.51	158.7	0.602
541	6.82	34.45	0.24	3.06	300	9.67	34.40	0.29	2.87	26.56	154.7	0.681
647	6.12	34.49	0.21	3.20	400	8.61	34.45	0.22	2.92	26.77	136.0	0.826
866	4.65	34.49	0.40	3.27	500	7.13	34.45	0.23	2.99	26.99	115.7	0.952
1077	3.89	34.49	0.56u	3.16u	600	6.43	34.48	0.22	3.15	27.11	105.1	1.062
1282	3.39	34.56	0.78	3.12	700	5.76	34.49	0.25	3.24	27.20	96.7	1.163
					800	5.07	34.49	0.34	3.27	27.28	88.9	1.256
					1000	4.11	34.49	0.56	3.24	27.39	78.9	1.424

130.70 CREST; May 6, 1950; 2356 GCT; 25°08'N, 116°10'W; sounding, 2,050 fm; wind, 300°, force 6; weather, cloudy; sea, very rough; wire angle, 26°.

0	17.73	33.93	5.08	0.31	0	17.73	33.93	5.08	0.31	24.54	340.3	0.000
9	17.73	33.89	5.33	0.32	10	17.73	33.89	5.33	0.32	24.51	343.8	0.034
22	17.67	33.89	5.26	0.30	20	17.68	33.89	5.28	0.30	24.52	343.0	0.068
49	17.50	33.89	5.41	0.35	30	17.61	33.89	5.30	0.31	24.54	341.7	0.103
71	14.29	33.58	5.39	0.53	50	17.50	33.89	5.41	0.36	24.56	339.8	0.171
96	12.62	33.66	4.02	1.33	75	13.80	33.58	5.36	0.56	25.15	284.2	0.249
140	11.60	34.25	1.52	2.41	100	12.49	33.69	3.60	1.54	25.50	251.7	0.316
182	10.99	34.45	0.78	2.75	150	11.49	34.29	1.26	2.51	26.15	190.6	0.427
270	10.00	34.60	0.22	3.00	200	10.78	34.50	0.60	2.82	26.45	163.9	0.515
365	8.14	34.43	0.45	3.06	250	10.25	34.58	0.28	2.96	26.60	150.0	0.593
458	7.48	34.45	0.24	3.20	300	9.37	34.58	0.28	3.03	26.75	136.6	0.665
552	6.50	34.42	0.27	3.29	400	7.91	34.43	0.41	3.10	26.86	126.9	0.797
738	5.12	34.45	0.36	3.38	500	6.98	34.44	0.25	3.26	27.00	114.0	0.918
928	4.34	34.47	0.50	3.19r	600	6.02	34.42	0.32	3.33	27.11	103.9	1.026
1119	3.83	34.51	0.66	3.33	700	5.34	34.45	0.37	3.37	27.22	94.2	1.125
					800	4.80	34.45	0.39	3.38	27.28	88.4	1.217
					1000	4.12	34.48	0.54	3.36	27.38	79.8	1.385

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

CREST; May 7, 1950; 0611 GCT; 24°55'N, 116°41W; sounding, 2,100 fm; wind, 330°, force 4; weather, cloudy; sea, moderate; wire angle, 21°. 130.80

0	17.64	33.91	5.36	0.31	0	17.64	33.91	5.36	0.31	24.55	340.0	0.000	
10	17.66	33.95	5.30	0.31	10	17.66	33.95	5.30	0.31	24.57	337.8	0.034	
24	17.64	33.95	5.28	0.34	20	17.65	33.95	5.28	0.34	24.57	337.9	0.068	
51	17.66	33.93	5.30	0.34	30	17.65	33.89	5.28	0.34	24.53	342.6	0.102	
75	15.59	33.67	5.54	0.36	50	17.65	33.78	5.29	0.34	24.44	351.2	0.171	
102	12.82	33.64	4.37	1.09	75	15.59	33.67	5.54	0.36	24.84	314.5	0.254	
152	10.48	33.91	2.68	1.99	100	13.05	33.64	4.50	1.00	25.35	265.9	0.327	
200	9.74	34.23	1.78	2.52	150	10.51	33.87	2.72	1.98	26.00	204.5	0.445	
299	8.40	34.31	0.86	2.83	200	9.74	34.23	1.78	2.52	26.42	166.1	0.537	
403	7.74	34.43	0.32	3.11	250	8.95	34.29	1.14	2.75	26.59	150.3	0.616	
504	6.72	34.42	0.20	3.24	300	8.39	34.31	0.86	2.83	26.69	141.2	0.689	
605	5.76	34.36	0.34	3.27	400	7.78	34.43	0.34	3.10	26.88	124.9	0.821	
804	4.79	34.45	0.37	3.35	500	6.77	34.42	0.21	3.24	27.01	112.8	0.941	
1007	4.12	34.47u	0.58u	3.17r	600	5.79	34.36	0.33	3.27	27.10	105.4	1.051	
1205	3.57	34.54	0.86	3.35	700	5.21	34.38	0.37	3.31	27.18	97.7	1.151	
					800	4.80	34.45	0.36	3.35	27.28	88.4	1.245	
					1000	4.16	34.50	0.55	3.35	27.39	78.8	1.412	

BLACK DOUGLAS; June 21, 1950; 0058 GCT; 40°42'N, 126°55'W; sounding, 1,680 fm; wind, 340°, force 6; weather, overcast; sea, high; wire angle, 25°. 40.70

0	13.19	32.70			0	13.19	32.70			24.60	335.1	0.000	
9	13.16	32.66			10	13.15	32.66			24.57	337.5	0.034	
22	13.15	32.66			20	13.15	32.66			24.57	337.7	0.067	
45	11.93	32.74			30	12.06	32.67			24.79	317.2	0.100	

BLACK DOUGLAS; June 20, 1950; 1729 GCT; 40°23'N, 127°40'W; sounding, 900 fm; wind, 340°, force 5; weather, overcast; sea, rough; wire angle, 33°. 40.80

0	13.60	32.66	5.82		0	13.60	32.66	5.82		24.49	345.7	0.000	
8	13.59	32.66	5.79		10	13.59	32.66	5.80		24.49	345.9	0.035	
21	12.40	32.74	5.87		20	12.40	32.74	5.87		24.78	318.0	0.068	
46	11.21	32.74	5.90		30	11.75	32.74	5.88		24.90	306.5	0.099	
67	10.44	32.74	5.89		50	11.07	32.74	5.90		25.03	295.2	0.159	
92	9.57	32.81	5.46		75	10.10	32.75	5.82		25.20	278.9	0.231	
138	9.20	32.94	5.20		100	9.45	32.84	5.39		25.38	262.5	0.299	
182	8.47	33.42	3.96		150	9.04	32.99	5.02		25.56	246.0	0.426	
265	7.50	33.96	2.33		200	8.20	33.66	3.52		26.21	184.7	0.534	
348	6.46	34.05	2.79r		250	7.65	33.92	2.52		26.50	158.3	0.619	
427	5.86	34.09	1.17		300	7.05	34.01	2.00		26.65	144.1	0.695	
506	5.27	34.20	0.95		400	6.05	34.08	1.32		26.84	127.0	0.830	
660	4.73	34.25	0.33		500	5.34	34.19	0.97		27.02	111.1	0.949	
823	4.11	34.38	0.29		600	4.88	34.25	0.55		27.12	102.1	1.056	
1004	3.48	34.43	0.33		700	4.59	34.28	0.30		27.17	97.4	1.155	
					800	4.20	34.37	0.30		27.29	87.1	1.248	
					1000	3.49	34.43	0.34		27.41	76.0	1.411	

BLACK DOUGLAS; June 20, 1950; 1001 GCT; 40°02'N, 128°25'W; sounding, 2,480 fm; wind, 300°, force 3; weather, overcast; sea, rough; wire angle, 0°. 40.90

0	12.28	32.79	6.05		0	14.28	32.79	6.05		24.44	349.6	0.000	
10	13.34	32.88	6.14		10	13.34	32.88	6.14		24.71	324.9	0.034	
25	12.15	32.86	6.22		20	12.45	32.87	6.21		24.87	309.3	0.065	
50	9.95	32.94	5.81		30	11.55	32.87	6.19		25.04	293.5	0.096	
74	8.88	33.17	5.87		50	9.95	32.94	5.81		25.37	262.3	0.151	
99	8.53	33.58	4.51		75	8.85	33.20	5.87		25.75	226.2	0.212	
152	7.82	33.84	2.81		100	8.52	33.60	4.40		26.12	192.1	0.264	
200	7.39	33.98	2.26		150	7.86	33.83	2.87		26.40	166.3	0.354	
296	6.51	34.07	1.71		200	7.39	33.98	2.26		26.58	149.6	0.433	
397	5.73	34.11	1.10		250	6.95	34.04	1.93		26.69	139.7	0.504	
494	5.23	34.20	0.62		300	6.49	34.07	1.69		26.78	132.1	0.573	
595	4.77	34.27	0.32		400	5.71	34.11	1.07		26.91	120.4	0.699	
794	4.11	34.38	0.29		500	5.20	34.20	0.60		27.04	108.6	0.814	
990	3.56	34.47	0.40		600	4.76	34.27	0.32		27.15	99.2	0.919	
1194	3.12	34.49	0.62		700	4.40	34.33	0.30		27.23	91.5	1.013	
					800	4.10	34.38	0.30		27.30	85.2	1.102	
					1000	3.53	34.47	0.41		27.43	73.5	1.260	

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

40.100 BLACK DOUGLAS; June 20, 1950; 0325 GCT; 39°42'N, 129°10'W; sounding, 2,500 fm; wind, 310°, force 2; weather, partly cloudy; sea, moderate; wire angle, 7°.

0	14.39	32.75	5.98	0	14.39	32.75	5.98	24.39	354.8	0.000
10	14.26	32.72	5.93	10	14.26	32.72	5.93	24.39	354.6	0.035
25	12.46	32.74	6.37	20	13.40	32.73	6.27	24.58	337.4	0.070
49	11.92	32.79	6.45	30	12.27	32.75	6.40	24.81	315.1	0.103
74	9.14	32.81	6.05	50	11.91	32.79	6.45	24.91	306.1	0.165
98	8.99	33.17	5.18	75	9.03	32.81	6.05	25.42	257.8	0.235
152	8.42	34.04	2.95	100	8.97	33.35	5.12	25.85	217.3	0.295
200	7.93	34.05	2.26	150	8.46	34.04	2.95	26.47	159.5	0.389
296	6.73	34.02	1.79	200	7.93	34.05	2.26	26.56	152.0	0.466
395	5.78	34.07	1.39	250	7.35	34.04	1.98	26.64	145.2	0.541
489	5.18	34.11	0.78	300	6.67	34.02	1.77	26.71	138.2	0.612
589	4.64	34.20	0.47	400	5.75	34.08	1.37	26.88	123.2	0.742
786	4.01	34.34	0.31	500	5.12	34.12	0.74	26.99	113.6	0.861
982	3.50	34.45	0.31	600	4.59	34.21	0.44	27.12	101.6	0.968
1185	3.09	-	0.52	700	4.24	34.29	0.33	27.22	92.6	1.065
				800	3.99	34.35	0.31	27.29	86.1	1.155
				1000	3.46	(34.46)	0.32	(27.42)	(74.2)	(1.316)

40.110 BLACK DOUGLAS; June 19, 1950; 2035 GCT; 39°23'N, 129°55'W; sounding, 2,460 fm; wind, 310°, force 3; weather, overcast; sea, rough; wire angle, 17°.

0	14.93	32.83	5.92	0	14.93	32.83	5.92	24.34	359.8	0.000
10	14.61	32.83	6.06	10	14.64	32.83	6.06	24.40	354.2	0.036
24	14.17	32.92u	5.90	20	14.27	32.82	5.90	24.47	347.7	0.071
47	11.63	32.74	6.44	30	13.90	32.80	5.95	24.53	342.2	0.105
71	10.69	32.77	6.36	50	11.50	32.74	6.44	24.95	302.6	0.170
94	9.74	32.72	6.40	75	10.50	32.77	6.35	25.15	284.0	0.243
146	8.16	32.83	5.93	100	9.51	32.72	6.38	25.28	272.3	0.313
191	7.76	32.83r	5.05	150	8.09	(32.87)	5.87	(25.61)	(240.9)	(0.441)
281	6.71	33.91	3.58	200	7.70	(33.72)	4.88	(26.33)	(173.1)	(0.545)
375	5.37	33.95	2.72	250	7.20	(33.87)	4.01	(26.52)	(155.8)	(0.626)
464	4.86	34.04	1.41	300	6.36	33.93	3.32	26.68	140.8	(0.701)
559	4.71	34.18	0.58	400	5.20	33.96	2.45	26.85	125.4	(0.833)
746	4.08	34.27	0.31	500	4.76	34.10	0.99	27.01	110.8	(0.951)
932	3.65	34.36	0.40	600	4.63	34.21	0.45	27.11	102.1	(1.059)
1131	3.18	34.45	0.47	700	4.29	34.26	0.31	27.19	95.4	(1.156)
				800	3.92	34.29	0.32	27.25	89.7	(1.250)
				1000	3.50	34.39	0.44	27.37	79.1	(1.419)

50.55 BLACK DOUGLAS; June 17, 1950; 0055 GCT; 39°30'N, 124°30'W; sounding, 1,110 fm; wind, 320°, force 2; weather, overcast; sea, moderate; wire angle, 18°.

0	12.47	32.63	6.39	0	12.47	32.63	6.39	24.68	327.1	0.000
10	12.42	32.66	6.31	10	12.42	32.66	6.31	24.71	324.3	0.033
24	12.23	32.68	6.22	20	12.30	32.68	6.24	24.75	320.6	0.065
48	9.38	32.83	6.30	30	12.06	32.70	6.23	24.81	315.0	0.097
71	9.33	32.86	5.68	50	9.35	32.84	6.30	25.39	260.0	0.154
94	8.82	33.28	4.99	75	9.29	32.87	5.57	25.43	257.3	0.219
142	8.42	33.68	4.18	100	8.76	33.39	4.87	25.92	211.2	0.277
184	8.03	33.87	2.92	150	8.37	33.72	4.02	26.24	181.9	0.376
267	6.85	34.02	2.14	200	7.79	33.92	2.69	26.48	159.5	0.461
354	6.08	34.05	1.31	250	7.08	34.00	2.26	26.64	144.5	0.537
437	5.58	34.09	0.77	300	6.52	34.04	1.87	26.75	134.7	0.607
525	5.33	34.16	0.55	400	5.78	34.07	0.96	26.87	124.3	0.736
701	4.51	34.27	0.33	500	5.39	34.14	0.59	26.97	115.4	0.856
879	4.10	34.42	0.34	600	5.03	34.22	0.45	27.08	106.2	0.967
1075	3.60	34.45	0.58	700	4.51	34.27	0.33	27.17	97.2	1.068
				800	4.25	34.35	0.33	27.27	89.1	1.162
				1000	3.80	34.44	0.46	27.38	78.9	1.329

SIO
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5006

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

BLACK DOUGLAS; June 17, 1950; 0510 GCT; 39°20'N, 124°52'W; sounding, 1,615; wind, calm; weather, overcast; sea, moderate; wire angle, 2°. 50.60

0	13.38	32.81	6.04	0	13.38	32.81	6.04	24.65	330.4	0.000
10	13.03	32.81	5.99	10	13.03	32.81	5.99	24.71	324.2	0.033
25	12.97	32.81	6.09	20	12.99	32.81	6.09	24.72	323.7	0.065
50	12.67	32.86	5.90	30	12.95	32.82	6.08	24.74	322.0	0.097
75	-	32.84	6.22	50	12.67	32.86	5.90	24.83	313.6	0.161
99	9.98	32.86	5.47	75	10.85	32.84	6.22	25.14	284.6	0.236
153	8.43	33.46	4.01	100	9.85	32.86	5.43	25.33	267.3	0.305
201	8.18	33.84	2.70	150	8.46	33.41	4.08	25.98	206.2	0.424
297	7.22	34.04	1.97	200	8.18	33.83	2.70	26.35	171.7	0.518
398	5.52	33.95u	1.80u	250	7.84	33.97	2.34	26.51	157.3	0.600
493	4.96	34.09	-	300	7.15	34.04	(1.93)	26.66	143.2	0.675
594	4.88	34.22	0.41	400	5.50	34.08	(0.94)	26.91	120.1	0.807
792	4.11	34.33	0.33	500	4.94	34.09	(0.59)	26.98	113.7	0.924
988	3.68	34.43	0.41	600	4.85	34.23	0.42	27.10	103.2	1.032
1191	3.16	34.49	0.66	700	4.55	34.29	0.35	27.19	96.2	1.132
				800	4.08	34.33	0.33	27.27	88.6	1.224
				1000	3.65	34.43	0.42	27.39	77.9	1.391

BLACK DOUGLAS; June 17, 1950; 1112, 1125 GCT; 39°00'N, 125°36.5'W; sounding, 2,100 fm; wind, 320°, force 1; weather, intermittent slight drizzle; sea, moderate; wire angle, 7°, 7°. 50.70

0	13.44	32.86	5.72	0	13.44	32.86	5.72	24.67	327.9	0.000
10	13.47	32.84	5.93	10	13.47	32.84	5.93	24.65	330.6	0.033
				20	13.40	32.84	5.99	24.66	329.3	0.066
25	13.29	32.84	6.01	30	13.20	32.84	6.01	24.70	325.7	0.099
49	12.70	32.86	6.00	50	12.65	32.86	6.00	24.83	314.4	0.163
74	11.50	32.92	6.02	75	11.50	32.92	6.02	25.09	289.9	0.238
99	9.84	33.12	5.75	100	9.84	33.14	5.74	25.55	246.4	0.305
152	8.74	33.48	3.80	150	8.77	33.46	3.90	25.97	207.1	0.419
200	8.18	33.89	2.56	200	8.18	33.89	2.56	26.40	167.4	0.512
295	7.25	34.02	1.73	250	7.66	33.98	2.05	26.54	154.0	0.592
394	6.36	34.04	0.99	300	7.20	34.02	1.67	26.64	145.4	0.668
489	5.65	34.09	0.70	400	6.31	34.04	0.95	26.78	133.3	0.807
589	4.99	34.14	0.46	500	5.58	34.10	0.68	26.92	120.8	0.934
785	4.18	34.23	0.33	600	4.93	34.14	0.45	27.02	110.9	1.050
980	3.72	34.43	0.33	700	4.48	34.18	0.35	27.11	103.5	1.156
1183	3.26	34.43	0.49	800	4.14	34.25	0.33	27.20	95.3	1.256
				1000	3.68	34.43	0.34	27.39	78.2	1.430

BLACK DOUGLAS; June 17, 1950; 1731, 1758 GCT; 38°40'N, 126°21'W; sounding, 2,360 fm; wind, calm; weather, overcast; sea, slight; wire angle, 5°, 5°. 50.80

0	13.48	32.84	5.81	0	13.48	32.84	5.81	24.65	330.1	0.000
10	13.41	32.84	5.91	10	13.41	32.84	5.91	24.66	329.0	0.033
25	13.27	32.84	6.09	20	13.33	32.84	6.05	24.68	328.0	0.066
50	12.94	32.91	6.14	30	13.22	32.85	6.12	24.71	325.4	0.099
75	12.61	32.88	5.99	50	12.94	32.91	6.14	24.81	316.1	0.163
99	10.34	33.03	5.76	75	12.61	32.88	5.99	24.85	312.8	0.241
153	9.45	33.53	3.69	100	10.30	33.03	5.73	25.39	262.0	0.313
201	8.42	33.78	3.04	150	9.49	33.51	3.80	25.89	214.5	0.433
296	7.38	34.04	1.72	200	8.45	33.78	3.05	26.27	179.5	0.531
				250	7.76	33.96	2.30	26.51	156.9	0.615
396	6.46	34.07	1.31	300	7.34	34.04	1.70	26.64	145.9	0.691
490	5.70	34.08	0.83	400	6.43	34.07	1.30	26.78	132.7	0.829
588	5.35	34.20	0.35	500	5.64	34.09	0.77	26.90	122.3	0.957
784	4.48	34.34	0.33	600	5.31	34.22	0.35	27.04	109.6	1.073
980	3.97	34.42	0.34	700	4.90	34.30	0.33	27.15	99.7	1.177
1183	3.44	34.46	0.57	800	4.41	34.35	0.33	27.25	91.1	1.273
				1000	3.93	34.43	0.36	27.36	81.2	1.446

S10

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	-‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

50.90 **BLACK DOUGLAS**; June 18, 1950; 0018, 0134 GCT; 38°20'N, 127°05'W; sounding, 2,460 fm; wind, 320°, force 2; weather, overcast; sea, moderate; wire angle, 2°, 5°.

0	13.60	32.75	6.21	0	13.60	32.75	6.21	24.55	339.8	0.000
10	13.35	32.75	6.17	10	13.35	32.75	6.17	24.60	335.1	0.034
25	13.03	32.74	6.15	20	13.12	32.74	6.15	24.64	331.6	0.067
50	11.65	32.68	6.31	30	12.90	32.72	6.17	24.67	329.1	0.100
75	10.52	32.74	6.21	50	11.65	32.68	6.31	24.88	309.7	0.164
99	9.71	32.75	6.06	75	10.52	32.74	6.21	25.12	286.8	0.239
153	8.77	33.37	4.38	100	9.67	32.75	6.05	25.27	272.8	0.309
202	8.64	33.86	2.38	150	8.80	33.08	4.55	25.67	235.8	0.436
299	7.47	33.96	2.04	200	8.65	33.85	2.40	26.29	177.3	0.539
				250	8.28	33.93	2.12	26.41	166.7	0.625
401	6.51	34.04	1.13	300	7.47	33.96	2.02	26.56	153.6	0.705
497	5.64	34.07	0.88	400	6.52	34.04	1.15	26.75	136.1	0.849
598	5.13	34.22	0.57	500	5.63	34.07	0.86	26.89	123.6	0.979
796	4.40	34.33	0.36	600	5.12	34.23	0.57	27.07	106.5	1.095
989	3.72	34.38	0.48	700	4.77	34.32	0.40	27.18	96.6	1.196
1190	3.24	34.47	0.64	800	4.38	34.33	0.42	27.24	92.2	1.290
				1000	3.69	34.38	0.49	27.35	82.0	1.465

50.100 **BLACK DOUGLAS**; June 18, 1950; 0805 GCT; 38°00'N, 127°49'W; sounding, 2,500 fm; wind, 280°, force 3; weather, overcast; sea, rough; wire angle, 0°.

0	14.11	32.94	5.90	0	14.11	32.94	5.90	24.59	335.5	0.000
10	13.97	32.94	5.72	10	13.97	32.94	5.72	24.62	332.9	0.033
25	13.63	32.94	5.40	20	13.65	32.94	5.45	24.69	326.4	0.066
49	12.24	32.97	5.94	30	13.52	32.94	5.43	24.72	324.5	0.099
74	10.08	33.03	5.71	50	12.20	32.97	5.94	25.00	298.1	0.161
99	9.28	33.26	4.82	75	10.07	33.03	5.70	25.42	257.7	0.231
154	8.23	33.80	2.70	100	9.27	33.26	4.81	25.74	228.6	0.291
203	7.80	33.95	2.24	150	8.29	33.78	2.80	26.29	176.3	0.393
299	6.63	34.00	1.79	200	7.83	33.94	2.27	26.49	158.6	0.476
398	5.95	34.11	0.90	250	7.31	33.99	2.00	26.60	148.4	0.553
493	5.40	34.18	0.61	300	6.62	34.00	1.77	26.70	139.0	0.625
595	4.95	34.18	0.34	400	5.93	34.11	0.88	26.88	123.2	0.756
796	4.24	34.29	0.31	500	5.36	34.18	0.60	27.01	112.1	0.874
993	3.78	34.42	0.34	600	4.93	34.18	0.35	27.06	107.9	0.984
1197	3.29	34.47	0.66	700	4.56	34.22	0.33	27.13	101.5	1.088
				800	4.24	34.30	0.31	27.23	92.7	1.186
				1000	3.77	34.42	0.35	27.37	80.0	1.358

50.110 **BLACK DOUGLAS**; June 18, 1950; 1405 GCT; 37°40'N, 128°33'W; sounding, 2,500 fm; wind, 310°, force 2; weather, overcast; sea, moderate; wire angle, 6°.

0	14.30	32.92	5.50	0	14.30	32.92	5.50	24.54	340.5	0.000
10	14.34	32.92	5.58	10	14.34	32.92	5.58	24.53	341.6	0.034
25	14.05	32.95	5.90	20	14.21	32.93	5.83	24.57	338.5	0.068
49	13.61	33.03	5.68	30	13.95	32.97	5.88	24.65	330.7	0.102
74	12.32	32.94	5.95	50	13.60	33.03	5.70	24.77	319.9	0.167
98	9.68	33.03	5.45	75	12.31	32.94	5.94	24.95	303.2	0.245
151	8.20	33.77	3.13	100	9.55	33.10	5.35	25.57	244.8	0.313
199	7.78	33.96	2.19	150	8.23	33.76	3.17	26.29	176.9	0.419
294	6.69	34.07	1.41	200	7.77	33.96	2.17	26.51	156.2	0.502
394	5.93	34.13	0.70	250	7.26	34.03	1.56	26.64	144.7	0.576
490	5.40	34.18	0.75	300	6.65	34.07	1.37	26.76	134.2	0.647
591	4.96	34.29	0.48	400	5.89	34.13	0.69	26.90	121.2	0.774
789	4.31	34.36	0.46	500	5.34	34.19	0.73	27.02	111.1	0.891
984	3.82	34.43	0.62	600	4.92	34.30	0.47	27.15	98.9	0.996
1187	3.33	34.49	0.70	700	4.57	34.34	0.47	27.22	92.7	1.091
				800	4.29	34.36	0.47	27.27	88.9	1.182
				1000	3.79	34.44	0.64	27.38	78.8	1.350

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

BLACK DOUGLAS; June 18, 1950; 1949 GCT; 37°20'N, 129°16.5'W; sounding, 2,600 fm; wind, 260°, force 2; weather, partly cloudy; sea, slight; wire angle, missing. 50.120

0	15.06	32.81	5.81	0	15.06	32.81	5.81	24.29	364.2	0.000
10	13.94	32.84	5.86	10	13.94	32.84	5.86	24.55	339.5	0.035
25	13.65	32.84	5.81	20	13.75	32.84	5.82	24.59	336.1	0.069
50	13.04	32.88	5.90	30	13.55	32.84	5.83	24.63	332.4	0.102
74	12.48	32.88	5.83	50	13.04	32.88	5.90	24.76	320.4	0.168
98	10.27	33.22	5.09	75	12.45	32.88	5.82	24.88	309.8	0.246
152	7.63	33.53	4.36	100	10.00	33.24	5.05	25.60	241.6	0.315
200	7.36	33.86	3.00	150	7.67	33.52	4.39	26.18	186.7	0.423
296	6.19	33.95	2.73	200	7.36	33.86	3.00	26.49	157.9	0.509
396	5.28	33.97	1.60	250	6.85	33.94	2.88	26.63	145.8	0.584
492	5.26	34.33r	0.66	300	6.15	33.95	2.69	26.73	135.9	0.655
594	4.73	34.20	0.49	400	5.27	33.97	1.55	26.85	125.5	0.786
794	4.11	34.36	0.33	500	5.24	34.11	0.63	26.97	116.0	0.906
990	3.53	34.43	0.39	600	4.68	34.21	0.50	27.11	102.7	1.016
1193	3.10	34.51	0.57	700	4.31	34.29	0.40	27.22	92.6	1.113
				800	4.10	34.36	0.33	27.29	86.6	1.203
				1000	3.50	34.43	0.40	27.41	76.1	1.365

BLACK DOUGLAS; June 18, 1950; 0143 GCT; 37°00'N, 130°00'W; sounding, 2,700 fm; wind, 260°, force 2; weather, partly cloudy; sea, moderate; wire angle, 6°. 50.130

0	15.88	32.83	5.04	0	15.88	32.83	5.04	24.13	379.5	0.000
10	14.60	32.83	5.97	10	14.60	32.83	5.97	24.41	353.4	0.037
25	14.13	32.81	5.63	20	14.35	32.82	5.75	24.45	349.3	0.072
50	12.18	32.77	6.00	30	13.92	32.80	5.65	24.53	342.6	0.106
74	10.67	32.72	5.92	50	12.18	32.77	6.00	24.85	312.3	0.172
98	9.82	32.72	5.97	75	10.66	32.72	5.92	25.08	290.3	0.247
151	8.03	33.06	5.03	100	9.70	32.72	5.97	25.24	275.3	0.318
199	8.46	33.80	3.02	150	8.04	33.10	5.10	25.80	223.1	0.443
294	7.09	33.98	1.93	200	8.46	33.80	2.99	26.28	178.1	0.543
395	5.81	34.05	1.30	250	7.85	33.92	2.25	26.47	161.2	0.627
491	5.18	34.13	0.85	300	7.00	33.99	1.88	26.65	144.9	0.704
592	4.69	34.18	0.62	400	5.76	34.05	1.27	26.85	125.5	0.839
791	3.92	34.49u	0.36	500	5.14	34.14	0.82	27.00	112.4	0.958
987	3.58	34.42	0.36	600	4.66	(34.18)	0.60	(27.09)	(104.7)	(1.066)
1190	3.14	34.49	0.62	700	4.25	(34.23)	0.45	(27.17)	(97.1)	(1.167)
				800	3.90	(34.29)	0.36	(27.25)	(89.5)	(1.260)
				1000	3.56	34.43	0.37	27.40	76.8	(1.428)

BLACK DOUGLAS; June 16, 1950; 1741 GCT; 38°58'N, 124°00'W; sounding, 210 fm; wind, 320°, force 2; weather, overcast; sea, moderate; wire angle, 22°. 53.54

0	10.44	33.03	5.88	0	10.44	33.03	5.88	25.36	262.3	0.000
9	9.96	33.03	6.28	10	9.73	33.03	6.28	25.48	251.1	0.026
23	8.52	33.26	5.14	20	8.65	33.12	5.60	25.72	228.2	0.050
46	8.31	33.51	3.73	30	8.35	33.36	4.60	25.96	206.2	0.071
69	8.57	33.82	4.02	50	8.34	33.61	3.74	26.15	187.9	0.111
92	8.27	33.91	3.11	75	8.53	33.85	4.00	26.31	173.3	0.156
143	7.58	34.09	1.79	100	8.15	33.94	3.00	26.44	161.5	0.198
189	7.42	34.09	1.59	150	7.55	34.09	1.76	26.65	142.7	0.273
230	7.13	34.13	1.29	200	7.36	34.09	1.54	26.67	140.9	0.345
260	7.03	34.13	1.27	250	7.07	34.13	1.28	26.75	134.7	0.413
302	6.55	34.16	1.06	300	6.56	34.16	1.06	26.84	126.3	0.479

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

5364 BLACK DOUGLAS; June 16, 1950; 1037, 0924 GCT; 38°38'N, 124°44'W; sounding, 2,150 fm; wind, 320°, force 5; weather, overcast; sea, very rough; wire angle, 2°, 23°.

0	11.53	33.26	5.86	0	11.53	33.26	5.86	25.35	263.7	0.000
10	11.52	33.28	5.86	10	11.52	33.28	5.86	25.36	262.3	0.026
25	11.69	33.35	5.90a)	20	11.58	33.35	5.92	25.41	258.4	0.052
				30	11.69	33.35	5.86	25.39	260.7	0.078
50p	8.77	33.15	5.19	50	8.77	33.15	5.19	25.73	228.3	0.127
73p	9.38	33.58	5.55	75	9.38	33.61	5.55	25.99	204.1	0.181
99p	8.51	33.80	2.66b)	100	8.50	33.80	2.74	26.28	177.0	0.229
146p	7.88	33.96	2.06	150	7.84	33.97	2.02	26.51	155.7	0.312
194p	7.65	34.04	1.73	200	7.61	34.04	1.70	26.00	148.1	0.388
288p	6.35	34.04	1.56	250	7.12	34.04	1.58	26.67	142.0	0.460
387p	5.61	34.11	0.79	300	6.15	34.04	1.50	26.80	129.9	0.529
483p	5.48	34.23	0.43	400	5.56	34.13	0.69	26.94	117.1	0.652
579p	4.94	34.25	0.33	500	5.40	34.24	0.40	27.05	108.1	0.765
769p	4.39	34.36	0.33	600	4.87	34.25	0.33	27.12	102.0	0.870
964p	3.71	34.43	0.42	700	4.57	34.31	0.33	27.20	95.0	0.968
1161p	3.25	34.47	0.68	800	4.30	34.38	0.33	27.28	87.5	1.059
				1000	3.60	34.44	0.46	27.40	76.5	1.223

5754 BLACK DOUGLAS; June 15, 1950; 1825 GCT; 38°24'N, 123°35'W; sounding, 140 fm; wind, 320°, force 3; weather, overcast; sea, rough; wire angle, 6°.

0	11.21	33.48	5.90	0	11.21	33.48	5.90	25.58	241.9	0.000
10	11.16	33.48	5.58	10	11.16	33.48	5.58	25.58	241.3	0.024
25	11.16	33.48	5.77	20	11.16	33.48	5.77	25.58	241.5	0.048
50	9.92	33.55	4.62	30	11.15	33.48	5.74	25.59	241.6	0.072
75	8.86	33.69	3.18	50	9.92	33.55	4.62	25.85	216.4	0.118
99	8.48	33.78	2.87	75	8.86	33.69	3.18	26.14	190.0	0.169
153	7.87	33.96	2.60	100	8.47	33.79	2.86	26.27	177.3	0.215
203	7.52	34.00	-	150	7.90	33.95	2.61	26.49	158.0	0.298
				200	7.54	34.00		26.58	150.0	0.376

5764 BLACK DOUGLAS; June 16, 1950; 0047 GCT; 38°04'N, 124°19'W; sounding, 2,130 fm; wind, 320°, force 5; weather, overcast; sea, rough; wire angle, 12°.

0	11.40	33.55	2.60r	0	11.40	33.55		25.60	240.0	0.000
10	11.38	33.51	4.49r	10	11.38	33.51		25.57	242.9	0.024
24	11.32	33.55	5.41r	20	11.34	33.55		25.61	239.4	0.048
54	9.66	33.60	4.96r	30	11.30	33.56		25.62	238.2	0.072
78	8.80	33.80	5.89r	50	10.20	33.59		25.84	218.0	0.118
107	8.49	33.93	2.22r	75	8.88	33.75		26.18	185.9	0.168
159	7.88	34.02	2.29	100	8.55	33.91		26.36	169.6	0.213
210	7.38	34.04	1.89	150	8.01	34.01		26.52	155.1	0.293
313	6.28	34.07	1.23	200	7.45	34.04	1.99	26.62	145.8	0.369
421	5.88	34.14	1.15	250	6.94	34.05	1.56	26.70	138.9	0.440
523	5.46	34.27	0.66	300	6.40	34.07	1.26	26.79	130.9	0.508
626	4.97	34.31	0.43	400	5.92	34.12	1.16	26.89	122.3	0.635
828	4.29	34.38	0.34	500	5.58	34.24	0.82	27.03	110.4	0.751
1036	3.60	34.45	0.48	600	5.08	34.31	0.44	27.14	100.1	0.856
1238	3.15	34.45	0.48	700	4.69	34.34	0.37	27.21	94.2	0.953
				800	4.37	34.37	0.34	27.27	89.1	1.045
				1000	3.73	34.44	0.45	27.39	78.1	1.212

a) Mean value of 5.75 and 6.06 ml/L.
b) Mean value of 2.64 and 2.87 ml/L.

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

BLACK DOUGLAS; June 15, 1950; 0120 GCT; 37°37'N, 123°37'W; sounding, 1,760 fm; wind, 320°, force 4; weather, cloudy; sea, rough; wire angle, 20°. 60.60

0	13.59	33.28	5.74	0	13.59	33.28	5.74	24.96	300.3	0.000
9	13.57	33.28	5.90	10	13.57	33.28	5.90	24.97	300.0	0.030
24	13.44	33.31	2.96r	20	13.50	33.29	5.79	24.99	298.2	0.060
52	9.27	33.73	3.32	30	9.95	33.35	5.49	25.69	231.3	0.086
76	8.71	33.84	2.33r	50	9.30	33.71	3.50	26.08	194.8	0.129
103	8.40	33.89	2.34	75	8.72	33.84	2.75	26.28	176.8	0.175
154	7.82	34.05	1.78	100	8.42	33.88	2.37	26.35	169.9	0.219
204	7.48	34.11	1.58	150	7.87	34.04	1.81	26.56	150.9	0.299
304	6.45	34.11	-	200	7.50	34.11	1.59	26.67	141.3	0.372
409	5.70	34.14	0.67	250	7.05	34.12	(1.44)	26.74	135.1	0.441
510	5.24	34.22	0.41	300	6.50	34.11	(1.21)	26.81	129.3	0.507
610	4.93	34.29	0.33	400	5.75	34.14	(0.71)	26.93	118.7	0.631
809	4.45	34.43	0.34	500	5.28	34.21	0.42	27.04	108.9	0.744
1013	3.86	34.49	0.43	600	4.97	34.28	0.33	27.13	101.0	0.850
1216	3.37	34.47	0.57	700	4.70	34.35	0.33	27.22	93.6	0.947
				800	4.47	34.42	0.34	27.30	86.6	1.037
				1000	3.89	34.49	0.42	27.41	76.3	1.200

BLACK DOUGLAS; June 14, 1950; 1850 GCT; 37°17'N, 124°21'W; sounding, 2,225 fm; wind, 320°, force 4; weather, overcast; sea, rough; wire angle, 2°. 60.70

0	12.98	33.08	5.80	0	12.98	33.08	5.80	24.93	303.0	0.000
10	12.98	33.01	5.81	10	12.98	33.01	5.81	24.88	308.6	0.030
25	12.93	33.04	5.91	20	12.96	33.03	5.89	24.90	307.0	0.061
49	10.57	33.40	5.81	30	10.70	33.07	5.90	25.35	264.2	0.090
74	9.08	33.46	4.16	50	10.56	33.40	5.78	25.63	237.9	0.140
98	8.58	33.69	3.59	75	9.05	33.46	4.12	25.93	219.0	0.196
151	7.99	33.93	2.70	100	8.55	33.72	3.54	26.21	183.6	0.245
199	7.51	34.04	2.13	150	8.00	33.93	2.71	26.46	160.9	0.331
294	6.31	34.04	1.57	200	7.50	34.04	2.11	26.61	146.5	0.409
395	5.66	34.20	0.72	250	6.90	34.04	1.79	26.70	139.1	0.480
490	5.08	34.20	0.43	300	6.25	34.04	1.52	26.78	131.2	0.548
591	4.77	34.31	0.33	400	5.62	34.20	0.70	26.99	112.6	0.669
788	4.15	34.40	0.34	500	5.02	34.20	0.42	27.06	106.5	0.779
982	3.66	34.52	0.51	600	4.75	34.32	0.33	27.19	95.4	0.880
1185	3.22	34.56	0.93	700	4.45	34.37	0.34	27.26	89.1	0.972
				800	4.10	34.40	0.35	27.32	83.7	1.058
				1000	3.61	34.53	0.54	27.47	70.0	1.212

BLACK DOUGLAS; June 14, 1950; 1146 GCT; 36°57'N, 125°04'W; sounding, 2,400 fm; wind, 320°, force 4; weather, partly cloudy; sea, rough; wire angle, 25°. 60.80

0	12.29	32.92	6.07	0	12.29	32.92	6.07	24.94	302.4	0.000
9	12.24	32.94	6.14	10	12.24	32.94	6.14	24.97	300.1	0.030
22	12.16	32.92	6.22	20	12.17	32.92	6.21	24.96	300.5	0.060
50	9.42	33.21	5.49	30	12.10	32.92	6.17	24.98	299.5	0.090
72	8.64	33.49	4.41	50	9.42	33.21	5.49	25.67	233.7	0.143
100	8.53	33.80	2.62u	75	8.47	33.54	4.36	26.08	195.4	0.197
148	7.82	33.98	2.55	100	8.53	33.80	3.55	26.27	177.4	0.249
194	7.44	34.05	2.01	150	7.79	33.98	2.51	26.53	154.2	0.326
284	6.69	34.09	1.21	200	7.40	34.05	1.95	26.64	144.4	0.402
375	5.37	34.13	0.99	250	7.00	34.08	1.47	26.72	137.4	0.472
464	5.06	34.20	0.39	300	6.51	34.09	1.14	26.79	130.9	0.539
555	4.75	34.31	0.31	400	5.20	34.15	0.87	27.00	111.2	0.660
739	4.27	34.42	0.34	500	4.94	34.24	0.35	27.10	102.5	0.767
934	3.83	34.49	0.34	600	4.61	34.35	0.31	27.23	91.5	0.864
1128	3.32	34.52	0.59	700	4.35	34.41	0.31	27.30	84.9	0.952
				800	4.13	34.45	0.35	27.36	80.3	1.034
				1000	3.66	34.50	0.38	27.44	72.8	1.188

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

6090 BLACK DOUGLAS; June 14, 1950; 0323 GCT; 36°37'N, 125°47'W; sounding, 2,480 fm; wind, 340°, force 4; weather, overcast; sea, rough; wire angle, 20°.

0	13.42	32.86	5.74	0	13.42	32.86	5.74	24.67	327.7	0.000
10	13.43	32.86	5.83	10	13.43	32.86	5.83	24.67	327.9	0.033
23	13.05	32.83	6.01	20	13.15	32.83	5.98	24.70	325.3	0.065
47	12.23	32.83	6.23	30	12.85	32.83	6.11	24.76	319.9	0.098
70	11.67	32.86	5.91	50	12.12	32.83	6.21	24.90	306.9	0.160
92	10.78	32.90	6.06	75	11.55	32.87	5.93	25.04	294.4	0.236
141	9.23	33.24	4.98	100	10.37	32.91	6.04	25.28	272.0	0.306
185	8.68	33.69	3.37	150	9.08	33.39	4.55	25.87	217.0	0.429
272	7.67	34.05	2.03	200	8.52	33.79	3.01	26.27	179.8	0.530
363	6.72	34.09	1.38	250	8.00	34.00	2.24	26.51	157.4	0.612
450	5.94	34.16	0.82	300	7.34	34.07	1.81	26.66	143.6	0.688
542	5.38	34.23	0.39	400	6.37	34.11	1.12	26.82	128.9	0.823
725	4.49	34.34	0.27	500	5.62	34.20	0.59	26.99	113.8	0.944
905	4.07	34.44	0.31	600	5.05	34.26	0.31	27.10	103.5	1.054
1103	3.50	34.50	0.49	700	4.58	34.32	0.27	27.21	94.3	1.152
				800	4.27	34.39	0.27	27.29	86.4	1.243
				1000	3.85	34.48	0.38	27.42	75.8	1.405

60100 BLACK DOUGLAS; June 13, 1950; 2003 GCT; 36°17'N, 126°30'W; sounding, 2,540 fm; wind, 350°, force 5; weather, overcast; sea, rough; wire angle, 35°.

0	14.26	32.97	5.81	0	14.26	32.97	5.81	24.59	336.0	0.000
8	14.26	32.97	5.85	10	14.27	32.97	5.84	24.58	336.5	0.034
21	14.27	32.95	5.81	20	14.27	32.95	5.81	24.57	338.2	0.067
41	14.48	33.08	5.73	30	14.33	33.01	5.76	24.60	335.3	0.101
61	12.87	32.90	6.00	50	13.00	33.04	5.80	24.90	307.7	0.165
80	11.65	32.86	5.85	75	12.45	32.86	5.90	24.86	311.3	0.243
122	9.24	32.94	5.50	100	9.80	32.87	5.68	25.34	265.7	0.315
160	8.76	33.35	4.76	150	8.87	33.25	4.96	25.79	224.1	0.438
231	7.79	33.89	3.58	200	8.26	33.78	4.00	26.30	176.7	0.538
306	6.80	33.96	3.12	250	7.52	33.92	3.40	26.52	156.5	0.621
377	5.88	34.02	3.12r	300	6.87	33.96	3.14	26.64	145.3	0.697
452	5.15	34.02	1.54	400	5.64	34.02	2.17	26.85	126.3	0.831
604	4.46	34.14	0.75	500	4.87	34.03	1.21	26.94	117.3	0.953
767	4.31	34.38	0.33	600	4.48	34.14	0.76	27.07	105.5	1.065
952	3.82	34.45	0.34	700	4.36	34.29	0.39	27.21	94.0	1.164
				800	4.25	34.40	0.34	27.30	85.4	1.254
				1000	(3.67)	(34.46)	(0.39)	(27.41)	(75.9)	(1.416)

60110 BLACK DOUGLAS; June 13, 1950; 1244 GCT; 35°57'N, 127°12'W; sounding, 2,630 fm; wind, 350°, force 5; weather, overcast; sea, rough; wire angle, 11°.

0	14.77	33.01	5.51	0	14.77	33.01	5.51	24.51	343.4	0.000
10	14.80	33.04	5.41	10	14.80	33.04	5.41	24.53	342.1	0.034
25	14.69	33.01	5.58	20	14.76	33.03	5.51	24.53	342.3	0.068
54	13.45	32.94	5.73	30	14.32	33.00	5.61	24.60	335.8	0.102
78	11.86	32.81	5.85	50	13.50	32.96	5.71	24.74	323.1	0.168
108	11.12	32.94	5.56	75	12.05	32.81	5.84	24.90	307.7	0.247
161	8.87	33.22	4.77	100	10.85	32.90	5.69	25.19	280.7	0.321
213	8.54	33.82	4.46	150	9.06	33.17	4.87	25.70	232.9	0.450
317	6.92	33.98	3.20	200	8.60	33.60	4.54	26.11	195.0	0.556
424	5.57	33.98	1.70	250	8.18	33.93	4.11	26.43	165.2	0.646
526	5.00	34.13	0.84	300	7.27	33.97	3.45	26.59	150.1	0.725
629	4.50	34.14	0.58	400	5.83	33.98	1.94	26.79	131.6	0.866
831	4.06	34.34	0.34	500	5.10	34.10	1.02	26.97	114.8	0.989
1037	3.50	34.43	0.47	600	4.65	34.14	0.61	27.05	107.5	1.100
1241	3.07	34.51	0.79	700	4.30	34.19	0.50	27.13	100.7	1.204
				800	4.10	34.31	0.36	27.25	90.3	1.300
				1000	3.63	34.42	0.43	27.38	78.4	1.468

BLACK DOUGLAS; June 13, 1950; 0511 GCT; 35°37'N, 127°54.5'W; sounding, 2,600 fm; wind, 020°, force 4; weather, overcast; sea, moderate; wire angle, 12°. 60.120

OBSERVED					INTERPOLATED					COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m
0	14.79	32.90	5.60		0	14.79	32.90	5.60		24.42	352.0	0.000
10	14.79	32.90	5.32		10	14.79	32.90	5.32		24.42	352.3	0.035
24	14.17	32.84	5.67		20	14.77	32.85	5.50		24.39	355.6	0.071
49	13.43	32.83	5.82		30	13.90	32.84	5.71		24.56	339.2	0.105
73	11.75	32.81	5.83		50	13.40	32.83	5.83		24.66	330.8	0.172
97	10.54	32.81	5.63		75	11.59	32.81	5.83		24.99	299.6	0.251
149	8.34	33.12	4.87		100	10.45	32.81	5.59		25.19	280.7	0.324
196	7.89	33.66	3.69		150	8.33	33.17	4.85		25.81	222.4	0.450
290	6.80	33.95	2.72		200	7.85	33.68	3.64		26.28	178.2	0.550
388	5.76	34.00	1.62		250	7.32	33.87	3.06		26.51	157.4	0.633
482	5.18	34.07	0.98		300	6.67	33.96	2.64		26.67	142.6	0.708
581	4.61	34.20	0.34		400	5.66	34.00	1.51		26.83	128.0	0.843
776	4.04	34.31	0.31		500	5.07	34.09	0.86		26.97	115.2	0.965
968	3.61	34.40	0.34		600	4.52	34.22	0.33		27.13	100.1	1.073
1169	3.16	34.51	0.66		700	4.20	34.29	0.31		27.22	92.1	1.169
					800	4.00	34.32	0.32		27.27	88.4	1.259
					1000	3.53	34.42	0.35		27.39	77.2	1.425

BLACK DOUGLAS; June 12, 1950; 2120 GCT; 35°17'N, 128°37'W; sounding, 2,580 fm; wind, 340°, force 3; weather, overcast; sea, moderate; wire angle, 17°. 60.130

0	15.61	33.11	5.57		0	15.61	33.11	5.57		24.40	353.5	0.000
10	15.63	33.10	5.36		10	15.63	33.10	5.36		24.39	354.9	0.035
24	-	33.13	5.47		20	15.56	33.13	5.40		24.43	351.5	0.071
48	15.33	33.15	6.07		30	15.43	33.13	5.57		24.46	349.1	0.106
71	14.71	33.25	5.66		50	15.32	33.16	6.06		24.51	345.1	0.175
94	14.00	33.33	4.55		75	14.66	33.27	5.30		24.73	324.1	0.259
143	11.02	33.24	5.10		100	13.62	33.33	4.56		25.00	299.6	0.337
186	9.40	33.45	4.84		150	10.70	33.25	5.09		25.49	253.4	0.475
272	7.81	33.87	4.44		200	9.10	33.56	4.76		26.00	205.6	0.590
360	6.49	33.96	2.55		250	8.17	33.81	4.54		26.34	174.0	0.685
444	5.49	33.97	1.73		300	7.36	33.91	4.12		26.53	155.8	0.767
535	4.93	34.05	0.89		400	5.94	33.97	2.06		26.77	133.7	0.912
716	4.24	34.21	0.34		500	5.10	34.01	1.20		26.90	121.5	1.040
901	3.89	34.34	0.34		600	4.64	34.12	0.54		27.04	108.9	1.155
1099	3.34	34.43	0.37		700	4.29	34.20	0.35		27.14	99.8	1.259
					800	4.07	34.27	0.35		27.22	93.0	1.356
					1000	3.64	34.40	0.35		27.37	80.0	1.529

BLACK DOUGLAS; June 15, 1950; 0650 GCT; 37°37'N, 123°07.5'W; sounding, 540 fm; wind, 320°, force 5; weather, overcast; sea, rough; wire angle, 40°. 61.55

0	12.81	33.26	6.00		0	12.81	33.26	6.00		25.10	286.8	0.000
8	12.82	33.26	6.08		10	12.82	33.27	6.09		25.11	286.5	0.029
19	12.81	33.33	6.09		20	12.80	33.33	6.09		25.16	281.9	0.057
38	12.05	33.31	6.09		30	12.42	33.32	6.09		25.23	275.9	0.085
57	10.48	33.44	5.39		50	11.63	33.33	5.94		25.38	261.4	0.139
76	9.14	33.58	4.19		75	9.18	33.58	4.20		26.00	203.1	0.197
112	8.43	33.84	2.97		100	8.61	33.78	3.11		26.25	180.1	0.245
144	8.14	33.89	3.02		150	8.08	33.90	3.01		26.42	164.3	0.331
205	7.60	34.05	2.26		200	7.64	34.02	2.35		26.58	150.0	0.410
270	7.31	34.09	1.43		250	7.38	34.08	1.63		26.66	142.7	0.482
332	6.95	34.16	1.09		300	7.16	34.12	1.24		26.73	137.4	0.552
398	6.43	34.15	0.98		400	6.40	34.15	0.97		26.85	126.4	0.684
465	5.91	34.16	0.75		500	5.70	34.19	0.51		26.97	115.6	0.805
542	5.50	34.25	0.39		600	5.28	34.29	0.39		27.10	104.1	0.916
632	5.20	34.30	0.38									

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5006

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

6357 BLACK DOUGLAS; June 6, 1950; 0335 GCT; 37°09'N, 122°58'W; sounding, 320 fm; wind, 320°, force 6; weather, partly cloudy; sea, very rough; wire angle, 15°.

0	13.04	33.15		0	13.04	33.15		24.97	299.4	0.000
10	13.05	33.15		10	13.05	33.15		24.97	299.6	0.030
24	12.04	33.37		20	12.30	33.36		25.28	270.5	0.058
48	10.60	33.39		30	11.75	33.38		25.40	259.4	0.085
72	9.12	33.49		50	10.08	33.39		25.70	230.8	0.134
95	8.91	33.73		75	9.10	33.53		25.97	205.5	0.188
146	8.03	33.89		100	8.87	33.75		26.18	186.2	0.237
191	7.94	34.04		150	8.02	33.90		26.43	163.4	0.325
237	7.56	34.14		200	7.88	34.07		26.58	149.7	0.404
283	7.22	34.14		250	7.46	34.14		26.70	139.3	0.475
335	6.60	34.16		300	7.03	34.14		26.76	134.1	0.544
382	5.87	34.11								

6367 BLACK DOUGLAS; June 6, 1950; 2034 GCT; 36°49'N, 123°41'W; sounding, 2,040 fm; wind, 320°, force 6; weather, partly cloudy; sea, high; wire angle, 22°.

0	12.01	33.12	6.94	0	12.01	33.12	6.94	25.15	282.5	0.000
10	12.04	33.08	6.22	10	12.04	33.08	6.22	25.11	286.2	0.028
23	11.88	33.10	6.06	20	11.92	33.09	6.10	25.14	283.5	0.057
51	9.54	33.22	5.50	30	11.65	33.12	6.00	25.22	276.8	0.085
75	9.31	33.44	5.96r	50	9.54	33.21	5.56	25.65	235.6	0.136
103	8.40	33.73	3.82	75	9.31	33.44	4.70	25.86	216.0	0.192
155	7.81	33.95	2.52	100	8.53	33.71	3.94	26.20	184.1	0.243
207	7.24	34.00	2.16	150	7.87	33.94	2.60	26.48	158.3	0.328
311	6.16	34.07	1.22	200	7.32	34.00	2.19	26.61	147.0	0.405
421	5.57	34.18	0.70	250	6.80	34.02	1.83	26.70	139.2	0.476
525	5.41	34.25	0.33	300	6.29	34.06	1.33	26.79	130.2	0.544
630	4.70	-	0.35	400	5.66	34.16	0.75	26.95	116.1	0.666
835	4.13	34.43	0.31	500	5.47	34.24	0.39	27.04	109.0	0.780
1043	3.59	34.49	0.78	600	4.87	(34.30)	0.34	(27.16)	(98.3)	(0.883)
1244	3.20	34.54	0.78	700	4.50	(34.36)	0.35	(27.25)	(90.4)	(0.977)
				800	4.23	(34.41)	0.32	(27.31)	(84.5)	(1.065)
				1000	3.70	34.48	0.72	27.43	74.8	(1.224)

6755 BLACK DOUGLAS; June 7, 1950; 1708 GCT; 36°39'N, 122°26'W; sounding, 1,140 fm; wind, 320°, force 4; weather, partly cloudy; sea, very rough; wire angle, 5°.

0	12.40	33.14	6.28	0	12.40	33.14	6.28	25.09	288.0	0.000
10	12.30	33.16	5.97	10	12.30	33.16	5.97	25.13	285.0	0.029
30	12.31	33.17	5.24	20	12.31	33.17	5.59	25.13	284.7	0.057
60	10.44	33.49	4.27	30	12.31	33.17	5.24	25.13	284.9	0.086
90	9.66	33.58	4.34r	50	11.00	33.41	4.60	25.56	244.6	0.138
118	9.03	33.75	3.17	75	10.01	33.53	3.95	25.82	219.8	0.196
176	8.09	34.02	2.25	100	9.41	33.62	3.45	25.99	204.1	0.250
232	7.48	34.40r	1.64	150	8.48	33.95	2.65	26.40	166.5	0.342
345	6.21	34.18	1.11	200	7.81	(34.05)	1.95	(26.58)	(150.1)	(0.422)
454	5.68	34.23	0.71	250	7.28	(34.11)	1.52	(26.70)	(139.1)	(0.494)
568	5.06	34.29	0.47	300	6.68	(34.15)	1.27	(26.81)	(128.7)	(0.560)
676	4.75	34.38	0.33	400	5.88	34.21	0.91	26.97	115.2	(0.682)
899	4.14	34.61	0.36	500	5.45	34.25	0.58	27.05	108.0	(0.794)
1116	3.70	34.59	0.79	600	4.94	34.31	0.41	27.16	98.4	(0.898)
1328	3.17	34.72u	1.09	700	4.70	34.41	0.34	27.26	89.1	(0.991)
				800	4.45	34.54	0.34	27.39	77.5	(1.075)
				1000	3.89	34.60	0.51	27.50	68.2	(1.220)

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

BLACK DOUGLAS; June 7, 1950; 0320 GCT; 36°19'N, 123°09'W; sounding, 1,790 fm; wind, 320°, force 6; weather, partly cloudy; sea, high; wire angle, 26°. 67.65

0	12.14	33.40	5.71	0	12.14	33.40	5.71	25.34	264.2	0.000	
10	12.13	33.37	5.15	10	12.13	33.37	5.15	25.32	266.5	0.026	
27	12.09	33.37	5.31	20	12.11	33.37	5.27	25.32	266.3	0.053	
54	9.23	33.49	2.91u	30	12.06	33.37	(5.29)	25.33	265.7	0.080	
80	8.59	33.80	2.56u	50	9.50	33.44	(4.55)	25.84	217.9	0.128	
106	8.00	33.91	2.77	75	8.70	33.76	(3.28)	26.22	182.5	0.178	
156	7.63	33.96	2.60	100	8.10	33.89	(2.84)	26.41	164.5	0.222	
203	7.17	34.02	2.04	150	7.66	33.96	2.63	26.53	153.9	0.301	
296	6.56	34.11	1.12	200	7.21	34.02	2.09	26.64	144.0	0.376	
384	6.08	34.20	0.54	250	6.80	34.07	1.54	26.74	135.5	0.445	
476	5.58	34.29	0.49	300	6.54	34.11	1.09	26.80	129.8	0.512	
568	5.09	34.31	0.40	400	5.98	34.22	0.51	26.96	115.7	0.635	
766	4.31	34.51	0.32	500	5.46	34.30	0.47	27.09	104.4	0.745	
969	3.82	34.45	0.40	600	4.93	34.32	0.37	27.17	97.5	0.846	
1177	3.31	34.49	0.80	700	4.52	34.44	0.32	27.31	84.7	0.937	
				800	4.20	34.51	0.32	27.40	76.7	1.017	
				1000	3.76	34.45	0.45	27.40	77.7	1.172	

BLACK DOUGLAS; June 9, 1950; 1857 GCT; 36°03'N, 122°02'W; sounding, 740 fm; wind, 320°, force 4; weather, haze; sea, rough; wire angle, 37°. 70.55

0	11.69	33.55	5.98	0	11.69	33.55	5.98	25.54	245.1	0.000	
8	11.62	33.51	5.60	10	11.61	33.50	5.60	25.52	247.6	0.025	
20	11.30	33.49	5.76	20	11.30	33.49	5.76	25.57	243.2	0.049	
44	11.05	33.57	5.36	30	11.19	33.51	5.70	25.60	240.0	0.073	
62	10.65	33.51	4.98	50	10.96	33.56	5.25	25.68	232.8	0.121	
85	9.80	33.73	4.50	75	10.12	33.65	4.70	25.90	212.7	0.176	
124	9.22	33.84	3.16	100	9.55	33.78	4.06	26.10	194.5	0.227	
161	8.38	33.93	2.47	150	8.72	33.91	2.62	26.33	173.0	0.319	
232	7.34	34.07	1.95	200	7.66	34.01	2.10	26.57	151.0	0.400	
306	6.88	34.14	1.14	250	7.21	34.09	1.78	26.69	139.6	0.473	
376	6.38	34.22	0.93	300	6.90	34.14	1.19	26.78	132.4	0.541	
450	6.05	34.18	0.62	400	6.25	34.21	0.86	26.92	119.9	0.666	
600	5.25	34.31	0.33	500	5.79	34.22	0.45	26.98	114.5	0.784	
766	4.71	34.42	0.31	600	5.25	34.31	0.33	27.12	102.2	0.893	
942	4.10	34.47	0.38	700	4.88	34.38	0.31	27.22	93.6	0.991	
				800	4.60	34.44	0.31	27.30	86.7	1.081	
				1000	(3.88)	(34.48)		(27.41)	(76.9)	(1.244)	

BLACK DOUGLAS; June 9, 1950; 2340 GCT; 35°53'N, 122°23'W; sounding, 1,730 fm; wind, 300°, force 3; weather, cloudy; sea, moderate; wire angle, 18°. 70.60

0	13.58	33.22	5.85	0	13.58	33.22	5.85	24.92	304.3	0.000	
10	13.23	33.17	6.05	10	13.23	33.17	6.05	24.95	301.4	0.030	
24	13.11	33.21	5.90	20	13.12	33.19	5.97	24.99	298.2	0.060	
48	10.93	33.39	5.38	30	13.09	33.25	5.81	25.04	293.5	0.090	
71	9.76	33.68	3.80	50	10.70	33.40	5.33	25.60	240.3	0.143	
95	9.21	33.75	3.01	75	9.65	33.70	3.60	26.02	201.5	0.198	
146	8.42	33.89	2.36	100	9.12	33.76	2.92	26.15	189.3	0.247	
191	7.96	34.00	2.20	150	8.37	33.91	2.34	26.38	167.8	0.336	
280	6.83	34.02	1.64	200	7.85	34.01	2.16	26.54	153.7	0.416	
372	6.37	34.16	0.80	250	7.20	34.02	1.88	26.64	144.6	0.491	
463	5.84	34.23	0.47	300	6.70	34.03	1.41	26.72	137.8	0.562	
554	5.57	34.31	0.35	400	6.21	34.19	0.65	26.91	120.9	0.691	
739	4.75	34.49	0.32	500	5.70	34.25	0.41	27.02	111.2	0.807	
927	4.10	34.47	0.40	600	5.43	34.36	0.33	27.14	100.8	0.914	
1127	3.57	34.51	0.64	700	4.92	34.47	0.32	27.29	87.4	1.008	
				800	4.50	34.49	0.34	27.35	81.8	1.092	
				1000	3.88	34.48	0.47	27.41	76.9	1.251	

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

7070 BLACK DOUGLAS; June 10, 1950; 0658 GCT; 35°33'N, 123°06'W; sounding, 2,080 fm; wind, 260°, force 1; weather, overcast; sea, slight; wire angle, 10°.

0	13.96	33.28	5.84	0	13.96	33.28	5.84	24.89	307.2	0.000
10	13.61	33.33	5.99	10	13.61	33.33	5.99	25.00	297.1	0.030
25	13.15	33.35	5.81	20	13.16	33.34	5.90	25.10	288.0	0.059
49	10.29	33.77	5.39	30	12.95	33.36	5.67	25.15	282.8	0.088
73	9.07	33.78	2.89	50	10.16	33.77	5.36	25.99	204.0	0.137
96	8.85	33.87	2.64	75	9.05	33.78	2.86	26.18	186.2	0.185
148	8.26	33.98	2.22	100	8.83	33.88	2.60	26.29	176.0	0.231
194	7.83	34.07	1.80	150	8.24	33.98	2.19	26.46	160.7	0.315
287	6.78	34.11	1.34	200	7.76	34.07	1.76	26.60	147.9	0.392
385	6.09	34.13	0.87	250	7.24	34.10	1.46	26.70	139.2	0.464
478	5.82	34.29	0.40	300	6.65	34.11	1.29	26.79	131.2	0.532
577	5.39	34.36	0.29	400	6.04	34.14	0.79	26.89	122.4	0.658
771	4.49	34.42	0.29	500	5.75	34.31	0.34	27.06	107.4	0.774
964	3.92	34.45	0.36	600	5.27	34.37	0.29	27.17	98.0	0.876
1165	3.41	34.51	0.68	700	4.79	34.41	0.29	27.25	90.2	0.970
				800	4.39	34.42	0.30	27.31	85.6	1.058
				1000	3.83	34.46	0.40	27.40	77.8	1.221

7080 BLACK DOUGLAS; June 10, 1950; 1339 GCT; 35°13'N, 123°48'W; sounding, 2,240 fm; wind, 280°, force 2; weather, overcast; sea, rough; wire angle, 0°.

0	13.85	33.24	5.91	0	13.85	33.24	5.91	24.88	308.1	0.000
10	13.32	-	6.15	10	13.32	33.24	6.15	24.99	298.3	0.030
25	12.45	33.24	6.08	20	12.74	33.24	6.14	25.10	287.4	0.060
49	10.08	33.39	5.44	30	12.18	33.25	5.99	25.22	276.7	0.088
74	9.20	33.55	4.95	50	10.03	33.41	5.44	25.73	228.5	0.138
98	8.64	33.62	4.26	75	9.12	33.55	4.95	25.99	204.4	0.192
152	8.45	33.93	2.03	100	8.63	33.63	4.20	26.12	191.7	0.242
199	8.10	34.02	1.75	150	8.45	33.92	2.06	26.38	168.2	0.332
295	6.46	34.02	1.67	200	8.08	34.02	1.74	26.51	156.3	0.413
396	5.70	34.11	0.93	250	7.24	34.02	1.67	26.64	145.2	0.488
494	5.30	34.23	0.40	300	6.41	34.02	1.65	26.75	134.8	0.558
592	5.06	34.29	0.32	400	5.66	34.11	0.89	26.91	119.8	0.685
791	4.34	34.42	0.31	500	5.30	34.23	0.39	27.05	107.6	0.799
987	3.78	34.49	0.47	600	5.02	34.30	0.32	27.14	100.1	0.904
1191	3.32	34.52	0.71	700	4.70	34.36	0.31	27.22	92.8	1.000
				800	4.31	34.43	0.31	27.32	83.9	1.088
				1000	3.75	34.49	0.48	27.43	74.6	1.247

7090 BLACK DOUGLAS; June 10, 1950; 1945 GCT; 34°53'N, 124°30'W; sounding, 2,340 fm; wind, 250°, force 1; weather, cloudy; sea, moderate; wire angle, 9°.

0	13.85	33.01	4.91	0	13.85	33.01	4.91	24.70	325.0	0.000
10	12.29	32.99	5.56	10	12.29	32.99	5.56	24.99	297.5	0.031
25	11.77	32.99	5.89	20	12.01	32.99	5.85	25.05	292.5	0.061
50	11.17	33.24	5.28	30	11.37	33.00	5.86	25.17	280.7	0.089
74	9.01	33.17	4.89	50	11.17	33.24	5.28	25.40	259.9	0.143
98	8.75	33.42	3.90	75	9.00	33.17	4.89	25.71	230.7	0.205
152	8.14	33.82	3.03	100	8.73	33.45	3.85	25.97	206.3	0.259
200	7.84	33.98	2.03	150	8.18	33.81	3.06	26.33	172.4	0.354
294	7.04	34.13	1.35	200	7.84	33.98	2.03	26.52	155.9	0.436
392	5.79	34.09	1.09	250	7.45	34.08	1.55	26.65	143.6	0.511
484	5.30	34.18	0.62	300	6.99	34.13	1.34	26.76	134.3	0.580
580	4.91	34.25	0.32	400	5.75	34.09	1.05	26.89	122.4	0.708
772	4.31	34.42	0.30	500	5.24	34.19	0.54	27.03	109.9	0.825
963	3.76	34.45	0.40	600	4.85	34.27	0.30	27.14	100.3	0.930
1165	3.36	34.51	0.70	700	4.52	34.35	0.30	27.24	91.4	1.025
				800	4.24	34.43	0.30	27.33	83.1	1.114
				1000	3.66	34.46	0.45	27.41	75.8	1.272

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

BLACK DOUGLAS; June 11, 1950; 0304 GCT; 34°33'N, 125°12'W; sounding, 2,520 fm; wind, 250°, force 2; weather, partly cloudy; sea, moderate; wire angle, 28°. 70.100

0	15.09	32.97	5.39	0	15.09	32.97	5.39	24.41	352.9	0.000
9	14.76	33.03	5.38	10	14.75	33.03	5.39	24.53	341.8	0.035
22	13.98	32.95	5.63	20	14.65	32.95	5.62	24.49	345.9	0.069
44	13.92	32.97	5.36	30	13.95	32.95	5.58	24.64	332.1	0.103
65	13.04	33.01	5.50	50	13.89	32.98	5.38	24.67	329.3	0.169
86	12.25	32.97	5.67	75	12.66	33.00	5.60	24.93	304.9	0.248
131	11.04	33.12	5.11	100	11.82	32.99	5.59	25.08	290.9	0.323
172	9.45	33.46	3.57	150	10.40	33.26	4.33	25.55	247.7	0.457
252	8.13	33.95	2.48	200	8.78	33.72	3.01	26.17	188.9	0.567
335	7.17	34.05	1.67	250	8.14	33.94	2.49	26.44	163.9	0.655
415	6.59	34.13	0.94	300	7.57	34.02	2.05	26.59	150.6	0.733
500	6.39	34.27	0.39	400	6.67	34.11	1.05	26.78	132.9	0.875
666	5.35	34.34	0.37	500	6.39	34.27	0.39	26.95	118.9	1.001
834	4.63	34.38	0.29	600	5.80	34.33	0.38	27.07	107.8	1.114
1025	3.87	34.43	0.37	700	5.18	34.35	0.35	27.16	99.5	1.218
				800	4.75	34.37	0.30	27.23	93.7	1.315
				1000	3.99	34.42	0.35	27.35	82.6	1.491

BLACK DOUGLAS; June 11, 1950; 1113 GCT; 34°13'N, 125°54'W; sounding, 2,220 fm; wind, 260°, force 3; weather, clear; sea, rough; wire angle, 15°. 70.110

0	14.78	32.99	5.63	0	14.78	32.99	5.63	24.49	345.0	0.000
10	14.81	32.96	5.56	10	14.81	32.96	5.56	24.46	348.3	0.035
29	-	32.97	5.83	20	(13.27)	32.97	5.65	(24.79)	(317.3)	(0.068)
58	12.49	32.92	5.98	30	(12.87)	32.97	5.84	(24.87)	(310.0)	(0.099)
87	11.97	32.97	5.90	50	(12.57)	32.93	5.96	(24.90)	(307.8)	(0.161)
116	10.62	33.17	5.43	75	12.23	32.94	5.95	24.97	301.4	(0.237)
173	8.63	33.73	3.39	100	11.60	33.03	5.74	25.16	284.1	(0.310)
230	7.97	33.96	2.64	150	9.13	33.56	4.36	25.99	205.2	(0.432)
341	6.51	34.02	1.53	200	8.27	33.88	3.00	26.38	169.4	(0.526)
447	5.73	34.14	0.73	250	7.76	33.99	2.44	26.54	154.7	(0.607)
559	5.23	34.27	0.36	300	7.07	34.01	1.89	26.65	144.3	(0.682)
667	5.00	34.33	0.31	400	6.00	34.07	1.05	26.84	127.1	(0.817)
891	4.27	34.47	0.37	500	5.46	34.21	0.48	27.02	111.1	(0.936)
1110	3.71	34.47	0.60	600	5.12	34.30	0.33	27.13	101.4	(1.044)
1335	3.17	34.51	0.89	700	4.93	34.36	0.31	27.20	95.7	(1.142)
				800	4.62	34.45	0.32	27.30	86.2	(1.233)
				1000	3.94	34.47	0.46	27.39	78.4	(1.397)

BLACK DOUGLAS; June 11, 1950; 1858 GCT; 33°53'N, 126°35.5'W; sounding, 2,560 fm; wind, 290°, force 2; weather, partly cloudy; sea, rough; wire angle, 10°. 70.120

0	15.42	33.22	5.64	0	15.42	33.22	5.64	24.53	341.5	0.000
10	15.21	33.22	5.45	10	15.21	33.22	5.45	24.58	337.3	0.034
25	-	33.22	5.15	20	15.06	33.22	5.19	24.61	334.5	0.068
49	14.66	33.26	5.08	30	14.93	33.22	5.13	24.64	332.1	0.101
73	12.64	33.26	5.51u	50	14.66	33.26	5.07	24.73	324.2	0.166
98	10.70	33.40	4.28	75	12.57	33.26	4.83	25.15	284.1	0.242
151	8.61	33.75	2.88	100	10.45	33.45	4.23	25.69	233.4	0.307
199	7.95	33.96	2.51	150	8.64	33.75	2.89	26.22	183.7	0.412
293	6.97	34.05	1.61	200	7.94	33.96	2.50	26.49	158.7	0.497
391	5.89	34.09	1.08	250	7.39	34.03	2.03	26.62	146.5	0.573
484	5.26	34.14	0.62	300	6.88	34.05	1.55	26.71	138.8	0.645
583	4.73	34.22	0.34	400	5.82	34.10	1.04	26.89	122.6	0.775
778	4.07	34.38	0.30	500	5.17	34.15	0.55	27.00	112.0	0.893
971	3.62	34.43	0.40	600	4.66	34.24	0.33	27.13	100.2	0.999
1173	3.24	34.51	0.70	700	4.30	34.32	0.30	27.24	91.0	1.094
				800	4.02	34.39	0.30	27.32	83.5	1.181
				1000	3.56	34.44	0.43	27.41	76.1	1.314

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

70130 BLACK DOUGLAS; June 12, 1950; 0240 GCT; 33°33'N, 127°16.5'W; sounding, 2,420 fm; wind, 320°, force 3; weather, cloudy; sea, rough; wire angle, 20°.

0	15.41	33.06	5.53	0	15.41	33.06	5.53	24.41	352.7	0.000
10	15.40	33.04	5.41	10	15.40	33.04	5.41	24.40	354.5	0.035
24	-	33.13	5.50	20	15.30	33.12	5.45	24.48	346.8	0.070
47	14.86	33.12	5.53	30	15.08	33.13	5.52	24.53	341.8	0.105
71	13.98	33.03	5.53	50	14.85	33.11	5.53	24.57	339.1	0.173
94	13.82	33.26	6.12	75	13.50	33.03	5.57	24.79	318.6	0.255
145	10.46	33.24	4.95	100	13.81	33.26	6.11	24.90	308.5	0.334
191	9.06	33.64	3.80	150	10.30	33.25	4.80	25.56	246.7	0.472
282	7.52	33.95	3.10	200	8.85	33.69	3.69	26.14	192.2	0.583
376	6.65	34.04	1.64	250	7.94	33.88	3.30	26.42	165.4	0.672
466	5.72	34.09	1.09	300	7.35	33.97	2.91	26.58	151.2	0.750
557	5.19	34.15	0.53	400	6.41	34.05	1.41	26.77	133.9	0.893
737	4.30	34.29	0.29	500	5.48	34.11	0.91	26.94	118.8	1.019
920	3.89	34.41	0.32	600	5.00	34.18	0.40	27.05	108.8	1.133
1122	3.46	34.45	0.64	700	4.50	34.26	0.30	27.17	97.8	1.237
				800	4.10	34.34	0.29	27.27	88.1	1.329
				1000	3.75	34.44	0.40	27.39	78.3	1.496

73.51 CREST; June 8, 1950; 1610 GCT; 35°35'N, 121°20'W; sounding, 170 fm; wind, 320°, force 5; weather, clear; sea, rough; wire angle, 31°.

0	11.46	33.44	5.87	0	11.46	33.44	5.87	25.50	249.2	0.000
9	11.43	33.40	6.20	10	11.41	33.40	6.20	25.48	251.5	0.025
21	10.38a)	33.35	5.25	20	10.39	33.35	5.25	25.62	237.9	0.050
42	9.46	33.55	4.15	30	9.88	33.36	4.65	25.71	229.4	0.073
64	9.03	33.78	3.36	50	9.26	33.67	3.85	26.06	197.1	0.115
84	8.66	33.89	2.60	75	8.80	33.86	2.82	26.28	176.5	0.162
128	8.30	33.96	2.15	100	8.50	33.92	2.38	26.37	168.1	0.205
169	8.04	-	-	150	8.15	34.00	2.00	26.49	157.9	0.286
213	7.90	34.13	1.18	200	7.93	34.11	1.33	26.61	147.4	0.363
260	7.50	34.18	-	250	7.61	34.17		26.70	139.2	0.434

73.61 CREST; June 8, 1950; 2034 GCT; 35°15'N, 122°03'W; sounding, 1,700 fm; wind, 340°, force 5; weather, clear; sea, rough; wire angle, 25°.

0	12.98	33.04	6.64	0	12.98	33.04	6.64	24.90	305.9	0.000
9	13.00	-	6.22	10	12.99	33.04	6.18	24.90	306.4	0.030
22	12.90	33.04	3.88r	20	12.91	33.04	5.98	24.91	305.3	0.061
51	11.30	33.10	4.34r	30	12.90	33.04	5.83	24.92	305.4	0.092
72	10.63	33.42	5.33	50	11.35	33.10	5.61	25.26	273.5	0.150
99	9.65	33.58	4.02	75	10.52	33.46	5.27	25.68	233.3	0.213
149	8.95	33.84	2.95	100	9.60	33.59	3.95	25.94	209.3	0.268
197	8.43	33.96	2.21	150	8.93	33.84	2.93	26.24	181.4	0.366
293	7.58	34.11	1.70	200	8.37	33.97	2.20	26.43	164.2	0.452
396	6.82	34.18	0.96	250	7.90	34.05	1.86	26.56	152.3	0.532
495	6.11	34.18	0.80	300	7.52	34.12	1.66	26.67	142.5	0.605
595	5.21	-	-	400	6.79	34.18	0.95	26.82	129.4	0.741
792	4.60	34.33	0.35	500	6.08	(34.18)	(0.80)	(26.92)	(121.3)	(0.866)
991	3.96	34.36	0.71	600	5.19	(34.21)	(0.64)	(27.05)	(108.9)	(0.981)
1185	3.44	34.47	0.90	700	4.79	(34.27)	(0.41)	(27.14)	(100.6)	(1.086)
				800	4.58	34.33	0.35	27.21	94.6	(1.184)
				1000	3.93	34.36	0.74	27.31	86.4	(1.365)

a) Alternate value, 10.20°C, not used in interpolation.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

CREST; June 9, 1950; 0755 GCT; 34°54'N, 121°13'W; sounding, 310 fm; wind, 340°, force 5; weather, clear; sea, very rough; wire angle, 8°. 77.55

0	11.49	33.66	6.26	0	11.49	33.66	6.26	25.67	233.3	0.000
10	11.52	33.62	6.30	10	11.52	33.62	6.30	25.63	237.2	0.024
25	11.42	33.64	5.24	20	11.44	33.63	5.50	25.65	235.3	0.047
49	9.29	33.64	4.28	30	11.15	33.64	4.97	25.71	229.8	0.070
74	9.39	33.82	2.92	50	9.29	33.64	4.22	26.03	199.8	0.113
98	8.85	33.87	2.65	75	9.39	33.82	2.90	26.15	188.5	0.162
151	7.87	-	2.27	100	8.76	33.87	2.63	26.29	175.7	0.207
199	7.48	34.04	1.67	150	7.88	33.96	2.28	26.50	157.0	0.290
248	7.22	34.11	1.28	200	7.47	34.04	1.67	26.62	146.1	0.367
297	6.82	34.13	0.87	250	7.20	34.11	1.26	26.71	137.9	0.437
351	6.39	-	-	300	6.78	34.13	(0.87)	26.79	131.5	0.505
400	6.35	34.22	-	400	6.35	34.22		26.91	120.5	0.631
453	6.12	34.22	-	500	(6.00)	(34.20)		(26.94)	(118.7)	(0.751)
498	6.00	34.20	-							

CREST; June 9, 1950; 0157 GCT; 34°34'N, 121°55'W; sounding, 2,100 fm; wind, 340°, force 6; weather, clear; sea, rough; wire angle, 38°. 77.65

0	12.82	33.15	6.33	0	12.82	33.15	6.33	25.02	295.1	0.000
8	12.83	33.13	6.25	10	12.82	33.13	6.25	25.00	296.8	0.030
20	12.74	33.13	6.30	20	12.74	33.13	6.30	25.02	295.5	0.059
44	11.07	33.35	6.22	30	12.68	33.14	6.30	25.04	293.9	0.089
64	10.65	33.48	5.05	50	10.90	33.45	6.00	25.61	239.9	0.142
87	8.91	33.46	4.29	75	9.80	33.48	4.70	25.82	220.1	0.200
115p	8.60	33.82	2.84	100	8.73	33.55	3.50	26.05	198.9	0.252
131	8.54	33.82	3.05	150	8.39	33.87	2.78	26.35	171.1	0.344
174	8.07	33.95	2.62	200	7.73	33.99	2.56	26.54	153.5	0.426
215p	7.56	34.00	2.54	250	7.22	34.02	2.28	26.64	144.9	0.500
317p	6.66	34.05	1.70	300	6.78	34.04	1.83	26.71	138.2	0.570
431p	5.81	-	-	400	6.03	(34.11)	(1.16)	(26.87)	(124.5)	(0.702)
633p	4.97	34.29	0.44	500	5.47	(34.19)	(0.67)	(27.00)	(112.7)	(0.821)
850p	4.38	34.34	0.50	600	5.08	(34.27)	(0.45)	(27.11)	(103.1)	(0.928)
1066p	3.78	34.45	0.71	700	4.76	34.32	0.44	27.19	96.5	(1.028)
				800	4.50	34.33	0.46	27.22	93.6	(1.124)
				1000	3.95	34.42	0.67	27.35	82.2	(1.300)

CREST; June 9, 1950; 1418 GCT; 34°19'N, 120°48'W; sounding, 450 fm; wind, 340°, force 6; weather, partly cloudy; sea, rough; wire angle, 33°. 80.55

0	11.52	33.42	4.94	0	11.52	33.42	4.94	25.47	251.5	0.000
9	11.50	33.49	4.66	10	11.50	33.49	4.66	25.53	246.4	0.025
21	11.48	33.49	5.07	20	11.48	33.49	5.07	25.53	246.3	0.050
42	10.48	33.35	3.74	30	11.46	33.47	4.72	25.52	247.7	0.074
63	10.02	33.78	2.92	50	10.25	33.35	3.22	25.64	236.5	0.123
84	9.40	33.80	2.70	75	9.75	33.80	2.77	26.08	195.7	0.177
128	8.77	33.95	1.86	100	9.09	33.82	2.52	26.20	184.4	0.224
164	8.43	-	1.67	150	8.55	34.00	1.74	26.43	163.8	0.311
200	8.35	34.07	1.06	200	8.35	34.07	1.06	26.51	156.5	0.392
236	8.28	34.09r	1.15r	250	8.17	34.11	0.81	26.57	151.8	0.468
278	7.93	34.16	0.71	300	7.74	34.17	0.60	26.68	141.9	0.542
318	7.58	-	-	400	7.11	34.18		26.78	133.8	0.679
398	7.12	34.18	-	500	6.62	34.23		26.89	124.8	0.809
494	6.64	34.23	-	600	(5.98)	(34.25)		(26.98)	(116.1)	(0.929)
591	6.04	34.25	-							

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

80.60 CREST; June 9, 1950; 1802 GCT; 34°09'N, 121°09'W; sounding, 1,400 fm; wind, 320°, force 6; weather, cloudy; sea, very rough; wire angle, 37°.

0	13.49	33.15	5.65	0	13.49	33.15	5.65	24.88	307.7	0.000
8	13.50	33.14	5.92	10	13.50	33.14	5.93	24.87	308.9	0.031
20	13.46	33.13	5.73	20	13.46	33.13	5.73	24.87	309.1	0.062
44	12.66	33.26	5.71	30	13.45	33.13	5.72	24.88	309.2	0.093
64	12.37	33.35	5.55	50	12.55	33.32	5.68	25.20	278.8	0.151
88	10.91	33.31	5.24	75	12.10	33.34	5.44	25.30	269.6	0.220
122	9.23	33.61	3.68	100	9.72	33.33	4.70	25.72	230.5	0.282
167	8.70	33.78	3.42	150	8.88	33.73	3.53	26.16	188.8	0.387
238	7.54	33.96	2.49	200	8.17	33.88	3.00	26.39	167.9	0.476
312	6.80	34.01	1.77	250	7.38	33.97	2.35	26.58	150.8	0.556
385	6.02	34.16	1.10	300	6.89	34.00	1.87	26.67	142.6	0.629
461	5.61	-	-	400	5.93	(34.18)	(1.00)	(26.94)	(118.0)	(0.760)
618	4.92a)	34.34	0.44	500	5.43	(34.27)	(0.61)	(27.07)	(106.3)	(0.872)
788	4.50	34.40	0.47	600	4.99	(34.33)	(0.45)	(27.16)	(98.3)	(0.974)
976	3.98	34.42	0.76	700	4.71	34.37	0.45	27.23	92.6	(1.069)
				800	4.47	34.40	0.49	27.28	88.1	(1.159)
				1000	(3.93)	(34.42)	(0.79)	(27.35)	(81.9)	(1.329)

80.70 CREST; June 9, 1950; 2348 GCT; 33°49'N, 121°58'W; sounding, 2,150 fm; wind, 320°, force 5; weather, partly cloudy; sea, moderate; wire angle, 22°.

0	14.12	33.13	6.17	0	14.12	33.13	6.17	24.74	321.3	0.000
10	14.10	33.13	5.84	10	14.10	33.13	5.84	24.74	321.4	0.032
29	13.92	33.13	6.25	20	13.97	33.13	6.00	24.77	319.1	0.064
52	12.14	33.28	5.78	30	13.92	33.13	6.25	24.78	318.4	0.096
75	11.40	33.40	5.16	50	12.25	33.24	5.85	25.20	279.1	0.156
103	9.84	33.52	4.31	75	11.40	33.40	5.16	25.48	252.8	0.222
154	8.68	33.84	2.62	100	10.00	33.51	4.42	25.81	221.6	0.282
204	7.84	33.96	2.48	150	8.77	33.82	2.72	26.25	180.4	0.382
305	6.45	34.03	1.88	200	7.91	33.96	2.50	26.49	158.3	0.466
410	5.59	34.07	1.28	250	7.26	34.01	2.24	26.62	146.2	0.543
511	5.33	34.18	0.63	300	6.52	34.03	1.91	26.74	135.5	0.613
613	4.97	-	-	400	5.63	34.06	1.34	26.88	123.2	0.742
814	4.34	34.36	0.66	500	5.35	34.17	0.65	27.00	112.7	0.860
1019	3.81	34.43	0.73	600	5.04	(34.25)	(0.63)	(27.10)	(104.1)	(0.969)
1220	3.30	34.51	0.93	700	4.66	(34.30)	(0.65)	(27.18)	(96.8)	(1.069)
				800	4.37	(34.35)	(0.65)	(27.25)	(90.6)	(1.163)
				1000	3.86	34.42	0.72	27.36	81.1	(1.334)

80.80 CREST; June 10, 1950; 0534 GCT; 33°31'N, 122°33'W; sounding, 2,200 fm; wind, 270°, force 3; weather, cloudy; sea, rough; wire angle, 20°.

0	13.49	33.28	5.63	0	13.49	33.28	5.63	24.98	298.2	0.000
9	13.44	33.26	5.85	10	13.40	33.26	5.85	24.99	298.2	0.030
23	13.12	33.28	5.82	20	13.13	33.27	5.84	25.05	292.6	0.059
51	12.02	33.30	5.63	30	13.10	33.29	5.78	25.07	290.8	0.088
75	11.16	33.46	4.81	50	12.07	33.30	5.65	25.28	271.5	0.145
103	9.35	33.53	3.79	75	11.16	33.46	4.81	25.57	244.2	0.209
153	8.28	33.77	3.80	100	9.50	33.52	3.80	25.90	212.9	0.266
203	7.75	33.91	3.63	150	8.30	33.76	3.80	26.28	177.9	0.364
302	6.84	33.99	2.32	200	7.80	33.91	3.63	26.47	160.4	0.448
407	6.04	34.13	1.12	250	7.22	33.96	3.18	26.59	149.3	0.526
507	5.65	34.25	0.47u	300	6.87	33.99	2.40	26.66	143.1	0.599
609	5.03	-	-	400	6.10	34.12	1.17	26.87	124.7	0.733
810	4.37	34.38	0.47	500	5.68	34.24	(0.80)	27.01	111.6	0.851
1015	3.80	34.44	0.55	600	5.10	(34.27)	(0.65)	(27.11)	(103.3)	(0.958)
1218	3.27	34.51	1.22r	700	4.66	(34.30)	(0.60)	(27.18)	(96.8)	(1.058)
				800	4.40	(34.37)	(0.48)	(27.26)	(89.5)	(1.152)
				1000	3.84	34.44	0.54	27.38	79.4	(1.320)

a) Mean value of 4.86 and 4.97°C.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
CREST; June 10, 1950; 1120 GCT; 33°12'N, 123°12'W; sounding, 2,200 fm; wind, 340°, force 4; weather, drizzle; sea, slight; wire angle, 11°.													80.90
0	14.76	33.15	5.81		0	14.76	33.15	5.81		24.62	332.9	0.000	
10	14.77	33.15	6.04		10	14.77	33.15	6.04		24.62	333.4	0.033	
25	14.54	33.15	6.15		20	14.55	33.15	6.12		24.66	329.2	0.066	
49	14.08	33.19	5.60a)		30	14.54	33.15	6.15		24.67	329.3	0.099	
74	12.43	33.10	5.60		50	14.06	33.19	5.60		24.80	317.2	0.164	
98	10.86	33.21	5.18		75	12.30	33.10	5.60		25.08	290.9	0.240	
152	9.03	33.53	4.37		100	10.72	33.23	5.12		25.47	254.2	0.308	
200	8.11	33.89	3.42		150	9.07	33.52	4.42		25.97	207.2	0.424	
295	6.89	34.04	2.10		200	8.11	33.89	3.42		26.41	165.7	0.517	
394	6.04	34.07	1.26		250	7.43	34.01	2.65		26.60	148.5	0.595	
490	5.33	34.14	0.79		300	6.84	34.04	2.05		26.70	139.0	0.667	
590	4.87	-	-		400	5.99	34.07	1.22		26.84	127.0	0.800	
787	4.32	34.33	0.46		500	5.28	(34.15)	(0.76)		(26.99)	(113.3)	(0.921)	
982	3.78	34.43	0.66		600	4.84	(34.23)	(0.55)		(27.11)	(103.1)	(1.029)	
1185	3.32	34.47	0.99		700	4.53	(34.28)	(0.47)		(27.18)	(96.7)	(1.129)	
					800	4.30	34.34	0.46		27.25	90.5	(1.222)	
					1000	3.73	34.44	0.70		27.39	78.1	(1.391)	
CREST; June 10, 1950; 1706 GCT; 32°49'N, 123°56'W; sounding, 2,300 fm; wind, 270°, force 2; weather, clear; sea, rough; wire angle, 5°.													80.100
0	15.13	33.22	5.65		0	15.13	33.22	5.65		24.59	335.4	0.000	
10	14.97	33.21	5.32		10	14.97	33.21	5.32		24.62	332.9	0.033	
25	14.66	33.24	5.48		20	14.76	33.24	5.43		24.69	326.9	0.066	
50	14.12	33.19	5.57		30	14.64	33.24	5.50		24.71		0.099	
74	11.46	33.10	5.65		50	14.12	33.19	5.57		24.79	318.4	0.163	
99	10.28	33.28	4.78		75	11.38	33.10	5.64		25.25	274.5	0.237	
154	8.72	33.68	3.47		100	10.23	33.28	4.73		25.59	242.4	0.302	
204	8.08	33.87	2.84		150	8.78	33.66	3.54		26.13	192.4	0.411	
301	6.78	34.02	2.10		200	8.12	33.86	2.87		26.38	168.7	0.501	
402	5.88	34.05	1.15		250	7.45	33.96	2.50		26.56	152.5	0.581	
499	5.23	34.13	0.79		300	6.81	34.02	2.12		26.69	140.1	0.655	
601	4.58	34.36	0.63		400	5.92	34.05	1.18		26.83	127.6	0.788	
800	4.08	34.16r	0.46		500	5.21	34.13	0.77		26.98	114.0	0.909	
996	3.61	34.45	0.68		600	4.58	34.36	0.64		27.24	90.4	1.011	
1199	3.18	34.49	0.87		700	4.23	34.40	0.51		27.31	84.3	1.098	
					800	4.08	34.42	0.46		27.34	82.0	1.181	
					1000	3.60	34.45	0.71		27.41	75.8	1.339	
CREST; June 10, 1950; 2252 GCT; 32°29'N, 124°34'W; sounding, 2,350 fm; wind, 240°, force 3; weather, cloudy; sea, rough; wire angle, 23°.													80.110
0	15.52	33.12	4.67		0	15.52	33.12	4.67		24.43	350.9	0.000	
9	14.74	33.04	5.27		10	14.73	33.04	5.28		24.54	340.6	0.034	
23	14.57	33.10	5.41		20	14.59	33.10	5.39		24.62	333.7	0.068	
46	14.02	33.06	5.55		30	14.56	33.09	5.45		24.62	334.1	0.102	
69	13.18	33.19	5.67		50	13.97	33.06	5.58		24.72	325.0	0.168	
91	11.62	33.19	5.60		75	12.75	33.19	5.68		25.06	292.6	0.245	
139	8.62	33.33	4.61		100	9.44	33.20	5.50		25.66	235.7	0.311	
182	8.28	33.86	3.32		150	8.50	33.43	4.25		25.99	205.3	0.421	
267	7.14	34.00	2.54		200	8.06	33.92	3.10		26.44	163.4	0.513	
357	6.33	34.00	1.31		250	7.36	33.99	2.69		26.59	149.1	0.591	
443	5.72	34.18	0.87		300	6.77	34.00	2.11		26.68	141.0	0.664	
535	4.88	-	-		400	6.00	34.09	1.04		26.86	125.6	0.797	
718	4.55	34.36r	0.47		500	5.20	(34.25)	(0.70)		(27.08)	(104.9)	(0.912)	
902	3.96	34.45	0.57		600	4.68	(34.31)	(0.54)		(27.19)	(95.3)	(1.013)	
1099	3.39	34.52	0.85		700	4.55	(34.35)	(0.48)		(27.23)	(91.8)	(1.106)	
					800	4.34	34.40	0.49		27.30	86.5	(1.195)	
					1000	3.62	34.49	0.71		27.44	73.1	(1.354)	

a) Alternate value, 6.22 ml/L, not used in interpolation.

S10

CCOFI 5006

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

80.120 CREST; June 11, 1950; 0438 GCT; 32°09'N, 125°15'W; sounding, 2,230 fm; wind, 270°, force 3; weather, clear; sea, moderate; wire angle, 12°.

0	15.66	33.08	5.52	0	15.66	33.08	5.52	24.37	356.8	0.000
10	14.84	33.09	4.12r	10	14.84	33.09	5.60	24.56	339.2	0.035
29	14.70	33.04	6.19	20	14.77	33.05	6.15	24.54	341.0	0.069
48	14.26	33.04	5.76	30	14.70	33.04	6.19	24.55	340.6	0.103
73	14.41	33.03	5.27	50	14.27	33.04	5.71	24.64	332.4	0.170
97	13.44	33.08	5.76r	75	14.41	33.03	5.23	24.60	336.6	0.254
151	10.70	33.39	3.98	100	13.25	33.09	4.77	24.89	310.0	0.335
198	8.84	33.71	3.66	150	10.77	33.38	3.99	25.58	245.0	0.473
291	7.43	34.05	2.46	200	8.77	33.73	3.65	26.18	188.0	0.582
387	6.03	34.02	1.74	250	7.86	33.98	3.08	26.51	156.9	0.668
479	5.16	34.09	1.41	300	7.31	34.05	2.35	26.65	144.7	0.743
577	5.13	-	-	400	5.84	34.02	1.71	26.82	128.8	0.880
769	4.49	34.35	0.44	500	5.15	(34.11)	(1.28)	(26.97)	(114.7)	(1.002)
961	3.88	34.45	0.60	600	5.12	(34.21)	(0.75)	(27.06)	(108.0)	(1.113)
1163	3.35	34.52	0.92	700	4.79	(34.30)	(0.51)	(27.17)	(98.4)	(1.216)
				800	4.37	33.37	0.45	27.27	89.1	(1.310)
				1000	3.77	34.47	0.66	27.41	76.3	(1.475)

80.130 CREST; June 11, 1950; 1024 GCT; 31°49'N, 125°56'W; sounding, 2,250 fm; wind, 270°, force 3; weather, clear; sea, moderate; wire angle, 8°.

0	16.12	33.42	6.00	0	16.12	33.42	6.00	24.53	341.5	0.000
10	16.10	33.39	5.76	10	16.10	33.39	5.76	24.51	343.8	0.034
25	15.55	33.31	5.97	20	15.60	33.32	5.92	24.57	338.5	0.068
49	15.30	33.37	6.08	30	15.55	33.31	6.02	24.57	338.5	0.102
74	15.69	33.43	5.59	50	15.31	33.38	6.07	24.68	328.9	0.169
99	13.28	33.36	5.74	75	15.69	33.43	5.60	24.63	334.0	0.252
153	12.38	33.73	4.99	100	13.28	33.36	5.74	25.09	290.8	0.330
203	9.53	33.73	4.58	150	12.50	33.73	5.03	25.53	250.1	0.465
299	7.64	33.98	3.50	200	9.65	33.73	4.60	26.04	201.7	0.579
401	6.20	34.04	2.04	250	8.47	33.81	4.12	26.29	178.4	0.673
498	5.17	34.11	1.23	300	7.63	33.99	3.48	26.56	153.7	0.756
600	4.78	-	-	400	6.21	34.04	2.07	26.79	132.0	0.899
800	4.10	34.40	0.36	500	5.17	(34.11)	(1.21)	(26.97)	(115.0)	(1.022)
995	3.70	34.51	0.74	600	4.78	(34.21)	(0.80)	(27.10)	(103.9)	(1.132)
1198	3.28	34.51	0.98	700	4.44	(34.31)	(0.50)	(27.21)	(93.4)	(1.230)
				800	4.10	34.40	0.36	27.32	83.7	(1.319)
				1000	3.69	34.51	0.75	27.45	72.4	(1.475)

83.55 CREST; June 16, 1950; 1454 GCT; 33°41'N, 120°25'W; sounding, 700 fm; wind, 320°, force 4; weather, drizzle; sea, rough; wire angle, 12°.

0	12.87	33.62	5.53	0	12.87	33.62	5.53	25.37	261.6	0.000
10	12.86	33.66	5.22	10	12.86	33.66	5.22	25.40	258.6	0.026
25	12.73	33.62	5.69	20	12.75	33.62	5.50	25.39	259.7	0.052
54	11.27	33.66	4.63	30	12.25	33.62	5.68	25.49	250.7	0.077
78	9.37	33.80	3.07	50	11.33	33.64	4.87	25.68	233.3	0.126
108	8.92	33.95	2.50	75	9.50	33.77	3.15	26.10	194.0	0.179
151	8.38	34.07	2.08	100	9.01	33.92	2.60	26.29	175.7	0.225
214	7.80	34.16	1.22	150	8.41	34.07	2.08	26.50	156.5	0.308
319	7.24	34.25	0.89	200	7.92	34.15	1.37	26.64	144.3	0.384
429	6.74	34.31	0.68	250	7.55	34.20	1.05	26.73	136.2	0.454
535	6.07	34.34	0.53	300	7.30	34.24	0.92	26.80	130.5	0.521
641	5.55	-	-	400	6.87	34.30	0.72	26.91	121.6	0.647
846	4.70	34.40	0.47	500	6.30	34.33	0.56	27.01	113.1	0.764
1053	4.02	34.52	0.69	600	5.73	(34.35)	(0.48)	(27.09)	(105.4)	(0.873)
1250	3.38	34.54	0.93	700	5.30	(34.36)	(0.47)	(27.15)	(100.3)	(0.976)
				800	4.89	(34.38)	(0.47)	(27.22)	(94.7)	(1.074)
				1000	4.17	34.49	0.63	27.38	79.7	(1.248)

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

CREST; June 16, 1950; 1118 GCT; 33°32'N, 120°45'W; sounding, 950 fm; wind, 320°, force 4; weather, drizzle; sea, rough; wire angle, 22°. 83.60

0	12.98	33.62	6.29	0	12.98	33.62	6.29	25.35	263.3	0.000
10	12.98	33.62	6.02	10	12.98	33.62	6.02	25.35	263.6	0.026
24	12.81	33.66	5.97	20	12.90	33.66	5.99	25.40	259.6	0.052
51	11.39	33.59	5.40	30	12.50	33.65	5.90	25.47	253.1	0.078
75	10.59	33.66	4.74	50	11.42	33.59	5.43	25.62	238.6	0.127
102	9.20	33.67	3.94	75	10.59	33.66	4.74	25.83	219.8	0.185
152	8.39	33.91	3.05	100	9.35	33.67	4.00	26.04	199.5	0.237
201	8.06	34.10	1.94	150	8.37	33.90	3.11	26.38	168.5	0.329
299	7.22	34.24	1.26	200	8.07	34.09	1.95	26.57	150.9	0.409
402	6.62	34.29	0.78	250	7.68	34.18	1.54	26.70	139.5	0.481
501	6.01	34.33	0.42	300	7.21	34.24	1.24	26.81	129.2	0.548
600	5.56	-	-	400	6.63	34.29	0.78	26.93	119.1	0.672
796	4.72	34.46	0.54	500	6.03	34.33	0.42	27.04	109.5	0.786
998	4.19	34.44	0.45u	600	5.56	34.39	0.44	27.15	100.1	0.892
1197	3.44	34.57	0.99	700	5.11	34.43	0.50	27.23	92.7	0.989
				800	4.70	34.46	0.55	27.30	87.2	1.078
				1000	4.18	34.44	0.75	27.35	82.7	1.248

CREST; June 16, 1950; 0605 GCT; 33°13'N, 121°25'W; sounding, 2,000 fm; wind, 320°, force 4; weather, overcast; sea, rough; wire angle, 20°. 83.70

0	14.72	33.17	5.53	0	14.72	33.17	5.53	24.65	330.4	0.000
9	14.66	33.13	6.08	10	14.67	33.11	6.10	24.61	334.3	0.033
23	13.94	33.08	6.24	20	13.97	33.08	6.23	24.73	322.7	0.066
51	12.37	33.06	6.12	30	13.89	33.07	6.24	24.74	322.2	0.098
75	12.03	33.15	5.69	50	12.38	33.06	6.14	25.03	294.7	0.160
103	9.28	33.04	5.25	75	12.03	33.15	5.69	25.17	282.5	0.232
153	8.55	33.74	3.71	100	9.45	33.04	5.30	25.53	247.7	0.298
202	8.07	33.96	2.78	150	8.59	33.70	3.80	26.19	186.6	0.407
300	6.82	34.00	1.83	200	8.10	33.96	2.81	26.46	161.0	0.494
403	5.94	34.13	1.17	250	7.51	33.98	2.25	26.57	151.9	0.572
502	5.37	34.20	0.71	300	6.82	34.00	1.83	26.68	141.7	0.646
602	4.92	-	-	400	5.95	34.13	1.18	26.89	122.0	0.777
802	4.47	34.43	0.60	500	5.39	34.20	0.71	27.02	111.0	0.894
1005	3.87	34.49	0.74	600	4.92	(34.27)	(0.61)	(27.13)	(101.1)	(1.000)
1206	3.36	34.51	0.95	700	4.63	(34.35)	(0.60)	(27.22)	(92.7)	(1.097)
				800	4.47	(34.43)	(0.60)	(27.30)	(85.9)	(1.186)
				1000	3.89	34.49	0.74	27.41	76.3	(1.348)

CREST; June 16, 1950; 0052 GCT; 32°54'N, 122°07'W; sounding, 2,175 fm; wind, 320°, force 4; weather, rain showers; sea, rough; wire angle, 44°. 83.80

0	14.53	33.06	5.28	0	14.53	33.06	5.28	24.59	335.3	0.000
8	14.50	33.04	5.56	10	14.40	33.04	5.56	24.61	334.0	0.033
19	14.18	33.04	5.23	20	14.18	33.04	5.23	24.66	329.8	0.067
40	14.18	33.01	5.38	30	14.17	33.02	5.33	24.64	331.4	0.100
58	13.91	33.15	5.13	50	14.03	33.14	5.25	24.77	320.3	0.165
78	11.98	33.08	4.77	75	12.85	33.08	4.82	24.96	302.6	0.243
112	9.81	33.17	4.54	100	10.32	33.12	4.63	25.45	255.7	0.312
142	9.26	33.53	3.44	150	9.13	33.60	3.16	26.02	202.2	0.427
200	8.37	33.89	2.23	200	8.37	33.89	2.23	26.37	170.2	0.520
259	7.73	34.02	1.74	250	7.81	34.02	1.80	26.55	153.2	0.601
317	6.76	34.02	1.49	300	7.10	34.02	1.52	26.65	144.0	0.675
375	6.23	-	-	400	6.06	34.07	1.27	26.83	127.9	0.810
491	5.59	34.16	0.81	500	5.56	34.17	0.78	26.97	115.3	0.932
625	4.84	34.23	0.52	600	4.99	34.22	0.56	27.08	105.7	1.044
791	4.32	34.33	0.41	700	4.53	34.26	0.45	27.16	98.2	1.144
				800	(4.30)	(34.34)	(0.40)	(27.25)	(90.5)	(1.240)

SIO

CCOFI

5006

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

83.90 CREST; June 15, 1950; 1939 GCT; 32°36'N, 122°46'W; sounding, 2,130 fm; wind, 320°, force missing; weather, overcast; sea, very rough; wire angle, 23°.

0	14.92	33.08	6.02	0	14.92	33.08	6.02	24.53	341.1	0.000
9	14.88	33.08	5.90	10	14.88	33.08	5.89	24.54	340.8	0.034
23	14.82	33.06	5.82	20	14.82	33.06	5.83	24.54	341.3	0.068
50	14.48	33.03	5.97	30	14.78	33.05	5.85	24.54	341.5	0.102
73	14.15	32.99	6.14	50	14.48	33.03	5.97	24.59	337.4	0.170
101	12.43a)	33.03	6.39	75	14.10	33.00	6.18	24.64	332.6	0.254
148	10.06	33.35	5.47	100	12.45	33.03	6.39	25.00	299.4	0.333
195	8.27	33.66	4.06	150	9.99	33.36	5.41	25.69	233.6	0.466
287	7.20	33.98	2.93	200	8.20	33.68	3.98	26.23	183.2	0.571
384	6.28	34.04	1.55	250	7.54	33.89	3.38	26.49	159.0	0.656
478	5.61	34.14	0.80	300	7.08	33.99	2.75	26.63	146.0	0.732
572	5.08	-	-	400	6.14	34.05	1.37	26.81	130.4	0.870
764	4.33	34.34	0.63	500	5.48	(34.17)	(0.74)	(26.98)	(114.3)	(0.992)
961	3.75	34.34	0.68	600	4.95	(34.26)	(0.64)	(27.12)	(102.2)	(1.101)
1160	3.38	34.49	1.04	700	4.56	(34.32)	(0.63)	(27.21)	(94.1)	(1.199)
				800	4.22	34.34	0.63	27.26	89.5	(1.291)
				1000	3.66	34.35	0.77	27.33	83.9	(1.464)

87.35 CREST; June 14, 1950; 0806 GCT; 33°49'N, 118°37'W; sounding, 400 fm; wind, 270°, force 3; weather, partly cloudy; sea, slight; wire angle, 0°.

0	16.11	33.60	5.85	0	16.11	33.60	5.85	24.67	328.2	0.000
10	15.60	33.58	6.09	10	15.60	33.58	6.09	24.76	319.4	0.032
25	12.58	33.57	5.73	20	13.48	33.57	5.95	25.21	277.2	0.062
50	10.33	33.58	3.93	30	11.80	33.57	5.47	25.54	246.3	0.088
75	9.78	33.78	3.05	50	10.33	33.58	3.93	25.81	220.8	0.135
100	9.10	33.89	2.57	75	9.78	33.78	3.05	26.04	199.1	0.188
154	8.68	34.05	1.90	100	9.10	33.89	2.57	26.25	179.3	0.235
203	8.50	34.13	1.53	150	8.71	34.04	1.94	26.43	163.2	0.320
251	7.96	34.13	1.13	200	8.52	34.13	1.53	26.53	154.6	0.400
300	7.65	34.16	0.77	250	7.97	34.13	1.13	26.62	147.4	0.475
354	7.32	34.22	0.60	300	7.65	34.16	0.77	26.69	141.4	0.548
402	7.03	-	-	400	7.04	34.24		26.84	128.4	0.682
500	6.40	34.27	-	500	6.40	34.27		26.94	119.0	0.806
603	5.89	34.31	-	600	5.91	34.31		27.04	110.7	0.922
703	5.34	34.34	-	700	5.37	34.34		27.13	102.7	1.027

87.40 CREST; June 14, 1950; 1126 GCT; 33°40'N, 118°58'W; sounding 390 fm; wind, 360°, force 3; weather, partly cloudy; sea, moderate; wire angle, 5°.

0	15.69	33.57	6.02	0	15.69	33.57	6.02	24.74	321.6	0.000
10	15.64	33.57	5.96	10	15.64	33.57	5.96	24.75	320.8	0.032
25	13.31	33.57	5.72	20	13.75	33.57	5.80	25.15	282.5	0.062
50	9.93	33.64	3.46	30	11.90	33.57	5.45	25.52	248.1	0.089
75	9.62	33.82	2.95	50	9.93	33.64	3.46	25.92	209.9	0.135
100	9.00	33.89	2.66	75	9.62	33.82	2.95	26.12	192.1	0.185
154	8.55	34.02	2.11	100	9.00	33.89	2.66	26.27	178.0	0.231
202	8.16	34.07	1.73	150	8.57	34.01	2.15	26.43	163.3	0.316
251	7.76	34.13	1.04	200	8.19	34.07	1.75	26.54	154.2	0.396
300	7.38	34.16	0.75	250	7.78	34.13	1.06	26.64	144.6	0.470
353	6.99	34.20	0.45	300	7.38	34.16	0.75	26.73	137.5	0.541
402	6.63	-	-	400	6.65	34.25		26.90	122.3	0.670
451	6.40	34.27	-	500	6.20	34.27		26.97	116.2	0.790
500	6.20	34.27	-	600	5.76	34.27		27.03	111.7	0.905
603	5.74	34.27	-							

a) Alternate value, 12.59°C, not used in interpolation.

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

CREST; June 14, 1950; 2038 GCT; 33°00'N, 120°21'W; sounding, 350 fm; wind, 320°, force 5; weather, cloudy; sea, rough; wire angle, 23°. 87.60

0	13.50	33.68	5.87	0	13.50	33.68	5.87	25.29	269.0	0.000
10	13.50	33.64	5.56	10	13.50	33.64	5.56	25.26	272.2	0.027
24	13.37	33.64	5.69	20	13.41	33.64	5.69	25.28	270.7	0.054
46	11.67	33.66	4.57	30	13.35	33.64	5.68	25.29	269.8	0.081
69	-	33.68	3.65	50	11.15	33.67	4.33	25.73	228.0	0.131
92	9.32	33.77	3.00	75	9.80	33.69	3.48	25.98	204.6	0.185
143	8.48	33.91	2.50	100	9.15	33.80	2.90	26.18	186.8	0.234
188	7.69	34.05	1.82	150	8.37	33.93	2.42	26.40	166.4	0.314
232	7.06	34.13	1.14	200	7.48	34.08	1.63	26.65	143.3	0.375
277	6.64	34.16	0.71	250	7.02	34.15	0.90	26.77	132.7	0.428
370	6.41	34.23	0.69	300	6.86	34.17	0.70	26.81	129.9	0.478
460	6.00	-	-	400	6.26	34.25	0.69	26.95	117.0	0.572
553	5.48	34.33	0.59	500	5.78	34.32	0.62	27.06	107.3	0.654
643	5.20	34.33	-	600	5.31	34.33		27.13	101.8	0.731
742	4.77	34.38	-	700	4.97	34.35		27.19	97.0	0.802

CREST; June 15, 1950; 0220 GCT; 32°39'N, 121°03'W; sounding, 2,000 fm; wind, 320°, force 4; weather, overcast; sea, rough; wire angle, 35°. 87.70

0	14.77	33.13	5.37	0	14.77	33.13	5.37	24.60	334.4	0.000
8	14.76	33.13	4.03r	10	14.76	33.13	5.25	24.60	334.7	0.033
21	14.75	33.13	4.99	20	14.75	33.13	5.00	24.61	334.7	0.067
45	14.50	33.10	5.10	30	14.74	33.11	5.03	24.59	336.3	0.100
62	14.04	33.15	5.02	50	14.47	33.10	5.07	24.64	332.0	0.167
83	11.11	33.37	5.13	75	13.07	33.26	5.11	25.05	293.5	0.246
120	9.99	-	4.60	100	10.42	33.47	4.98	25.71	231.5	0.311
157	9.07	33.57	3.25	150	9.23	33.56	3.47	25.98	206.7	0.421
232	8.04	33.93	2.36	200	8.42	33.71	2.67	26.22	184.2	0.418
310	7.16	34.04	1.80	250	7.83	33.98	2.23	26.52	156.5	0.603
385	6.20	34.09	1.23	300	7.26	34.03	1.88	26.64	145.5	0.679
459	5.67	-	-	400	6.07	(34.10)	(1.16)	(26.85)	(125.8)	(0.814)
607	4.90	34.22	0.56	500	5.46	(34.17)	(0.80)	(26.99)	(114.1)	(0.934)
770	4.45	34.38	0.41	600	4.94	(34.25)	(0.57)	(27.11)	(102.8)	(1.042)
955	3.88	34.40	0.68	700	4.62	34.35	0.45	27.22	92.6	(1.140)
				800	4.35	34.38	0.43	27.28	88.1	(1.231)
				1000	(3.75)	(34.41)	(0.75)	(27.36)	(80.5)	(1.400)

CREST; June 15, 1950; 0802 GCT; 32°20'N, 121°43'W; sounding, 2,250 fm; wind, 320°, force 4; weather, cloudy; sea, very rough; wire angle, 23°. 87.80

0	14.46	33.06	6.24	0	14.46	33.06	6.24	24.62	333.2	0.000
10	14.45	33.06	5.88	10	14.45	33.06	5.88	24.62	333.5	0.033
23	14.45	33.06	6.09	20	14.45	33.06	6.10	24.62	333.8	0.067
51	14.45	33.13	5.94	30	14.49	33.08	6.09	24.62	333.4	0.100
74	14.12	33.07	5.93	50	14.52	33.13	5.95	24.66	330.9	0.166
101	13.72	33.32	5.90	75	14.12	33.07	5.92	24.69	327.9	0.249
151	10.16	33.25	5.34	100	13.76	33.32	5.90	24.96	303.1	0.328
199	8.80	33.69	3.68	150	10.21	33.25	5.35	25.57	245.3	0.464
297	7.30	34.00	2.60	200	8.78	33.73	3.65	26.18	188.1	0.574
400	6.21	34.06	2.21	250	7.97	33.94	2.92	26.47	161.4	0.661
499	5.57	34.14	0.92	300	7.25	34.00	2.59	26.62	147.6	0.737
598	5.01	-	-	400	6.21	34.06	2.21	26.80	130.7	0.877
796	4.26	34.39	0.47	500	5.57	(34.14)	(0.92)	(26.95)	(117.8)	(1.001
997	3.69	34.47	0.71	600	5.00	(34.22)	(0.78)	(27.08)	(105.8)	(1.113)
1196	3.26	34.54	0.95	700	4.55	(34.30)	(0.61)	(27.19)	(95.5)	(1.213)
				800	4.23	34.40	0.47	27.31	85.2	(1.304)
				1000	3.69	34.47	0.72	27.42	75.4	(1.464)

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
87.90	CREST; June 15, 1950; 1344 GCT; 32°01'N, 122°24'W; sounding, 2,275 fm; wind, 320°, force 4; weather, overcast; sea, rough; wire angle, 21°.											
0	15.51	33.33	5.64		0	15.51	33.33	5.64		24.59	335.5	0.000
10	15.52	33.34	5.50		10	15.52	33.34	5.50		24.60	335.1	0.034
24	15.51	33.35	5.56		20	15.52	33.35	5.53		24.61	334.6	0.067
51	15.64	33.48	5.79		30	15.52	33.37	5.61		24.62	333.4	0.100
75	14.32	33.14	5.78		50	15.63	33.48	5.78		24.68	328.3	0.166
102	14.18	33.44	5.52		75	14.32	33.14	5.78		24.70	326.8	0.248
152	11.15	33.49	5.11		100	14.23	33.44	5.54		24.95	303.7	0.327
200	9.06	33.66	4.08		150	11.15	33.49	5.14		25.59	243.5	0.464
297	7.52	33.96	3.32		200	9.06	33.66	4.08		26.08	197.6	0.575
399	6.61	34.05	1.61		250	8.33	33.86	3.66		26.35	172.7	0.667
497	5.62	34.13	1.05		300	7.49	33.97	3.29		26.56	153.2	0.748
595	4.74	-	-		400	6.60	34.05	1.59		26.75	136.4	0.893
790	4.45	34.40	0.59		500	5.60	(34.13)	(1.04)		(26.94)	(118.8)	(1.021)
991	3.95	34.47	0.69		600	4.72	(34.23)	(0.78)		(27.12)	(101.7)	(1.131)
1190	3.40	34.51	0.87		700	4.50	(34.33)	(0.62)		(27.22)	(92.6)	(1.228)
					800	4.43	34.41	0.59		27.29	86.9	(1.318)
					1000	3.92	34.47	0.70		27.39	78.1	(1.483)
90.30	CREST; June 14, 1950; 0248 GCT; 33°24'N, 117°55'W; sounding, 335 fm; wind, 220°, force 1; weather, cloudy; sea, slight; wire angle, 6°.											
0	17.20	33.58	5.40		0	17.20	33.58	5.40		24.40	354.0	0.000
10	16.48	33.57	5.50		10	16.49	33.57	5.50		24.56	339.2	0.035
25	13.89	33.49	6.03		20	14.52	33.50	5.92		24.94	303.0	0.067
49	10.83	33.57	4.63		30	12.75	33.49	6.02		25.29	269.5	0.095
74	9.66	33.70	3.02		50	10.72	33.58	4.50		25.74	227.3	0.145
98	9.30	33.82	2.77		75	9.61	33.71	2.99		26.03	200.1	0.198
153	8.76	34.02	2.15		100	9.27	33.83	2.74		26.18	186.4	0.247
202	8.48	34.09	1.70		150	8.79	34.02	2.18		26.40	165.9	0.335
251	8.64	34.25	0.99		200	8.49	34.08	1.73		26.50	157.9	0.416
300	8.08	34.27	0.60		250	8.63	34.25	0.99		26.61	148.3	0.492
354	7.60	-	-		300	8.08	34.27	0.60		26.71	139.5	0.564
403	7.37	34.29	-		400	7.40	34.29			26.82	129.8	0.699
452	6.60	34.27	-		500	6.40	34.24			26.92	121.1	0.824
502	6.39	34.24	-									
90.37	CREST; June 13, 1950; 2135 GCT; 33°11'N, 118°24'W; sounding, 630 fm; wind, 270°, force 3; weather, partly cloudy; sea, moderate; wire angle, 16°.											
0	16.53	33.57	5.52		0	16.53	33.57	5.52		24.55	339.8	0.000
9	16.26	33.55	5.73		10	16.25	33.53	5.72		24.58	336.8	0.034
24	12.02	33.47	5.40		20	13.80	33.48	5.52		25.07	290.1	0.065
48	10.32	33.57	-		30	11.25	33.48	5.08		25.57	243.3	0.092
71	9.69	33.68	3.66		50	10.25	33.58	4.25		25.82	219.5	0.138
96	9.12	33.87	2.97		75	9.60	33.71	3.52		26.03	200.0	0.190
148	8.60	34.00	2.30		100	9.06	33.89	2.88		26.26	178.7	0.238
195	8.22	34.10	1.92		150	8.58	34.00	2.27		26.42	164.2	0.323
289	7.60	34.20	1.09		200	8.19	34.11	1.87		26.57	151.2	0.403
388	7.34	34.29	0.69		250	7.84	34.17	1.44		26.67	142.5	0.476
484	6.41	34.28	0.52		300	7.54	34.21	1.02		26.74	136.1	0.546
584	5.81	-	-		400	7.27	34.29	0.66		26.84	127.9	0.677
681	5.19	34.33	0.44		500	6.28	34.28	0.50		26.97	116.5	0.799
782	4.82	34.36	0.54		600	5.71	34.30	0.45		27.06	108.8	0.912
980	4.25	34.43	-		700	5.10	34.34	0.46		27.16	99.3	1.016
					800	4.78	34.37			27.22	94.1	1.114
					1000	(4.19)	(34.44)			(27.34)	(83.6)	(1.291)

CREST; June 13, 1950; 1622 GCT; 32°56'N, 118°58'W; sounding, 850 fm; wind, 320°, force 5; weather, overcast; sea, rough; wire angle, 20°. 90.45

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
0	15.30	33.66	5.38		0	15.30	33.66	5.38		24.89	306.8	0.000
10	15.31	33.62	5.73		10	15.31	33.62	5.73		24.86	310.2	0.031
23	14.91	33.58	5.10		20	14.95	33.58	5.28		24.91	305.9	0.062
51	10.10	33.62	3.09		30	12.30	33.58	4.30		25.45	254.6	0.090
75	9.71	33.78	2.73		50	10.20	33.62	3.10		25.86	215.7	0.137
103	9.06	33.87	2.40		75	9.71	33.78	2.73		26.07	196.4	0.188
154	8.64	34.07	1.64		100	9.11	33.86	2.44		26.23	181.7	0.235
205	8.24	34.20	1.29		150	8.67	34.06	1.70		26.46	161.1	0.321
306	7.36	34.22	0.96		200	8.28	34.19	1.30		26.62	146.6	0.398
411	6.61	34.25	0.62		250	7.82	34.22	1.11		26.71	138.5	0.469
513	6.06	34.31	0.42		300	7.40	34.22	0.98		26.77	133.4	0.538
615	5.50	34.34	0.47		400	6.66	34.24	0.65		26.89	123.2	0.666
816	4.74	34.45	0.48		500	6.13	34.30	0.44		27.00	113.0	0.784
1023	4.05	34.49	0.54		600	5.58	34.34	0.47		27.11	104.2	0.893
1226	3.84	34.52	0.53		700	5.15	34.38	0.48		27.19	96.9	0.993
					800	4.79	34.44	0.48		27.28	89.1	1.086
					1000	4.11	34.49	0.52		27.39	78.9	1.254

CREST; June 13, 1950; 1109 GCT; 32°40'N, 119°30'W; sounding, 400 fm; wind, 320°, force 5; weather, cloudy; sea, rough; wire angle, 23°. 90.53

0	14.37	33.60	6.08	0	14.37	33.60	6.08	25.04	292.5	0.000
9	14.38	33.66	6.00	10	14.38	33.66	6.00	25.09	288.3	0.029
23	14.34	33.62	5.85	20	14.36	33.63	5.90	25.07	290.2	0.058
46	11.16	33.62	4.83	30	14.00	33.62	5.67	25.14	284.0	0.087
69	10.10	33.68	3.79	50	11.05	33.63	4.52	25.72	229.2	0.138
92	9.24	33.73	3.61	75	9.76	33.70	3.72	26.00	203.2	0.192
145p	8.49	34.11	2.19	100	9.07	33.76	3.53	26.16	188.5	0.241
207p	7.84	34.18	1.42	150	8.40	34.12	2.05	26.54	152.7	0.326
331p	7.10	34.31	0.77	200	7.90	34.18	1.48	26.67	141.8	0.400
441p	6.27	-	-	250	7.59	34.22	1.15	26.74	135.2	0.469
544p	5.68	34.38	0.46	300	7.30	34.28	0.90	26.83	127.5	0.535
				400	6.59	34.34	0.65	26.98	114.8	0.656
				500	5.91	34.37	0.50	27.09	105.0	0.766

CREST; June 13, 1950; 0556 GCT; 32°22'N, 120°00'W; sounding, 1,600 fm; wind, 340°, force 4; weather, cloudy; sea, rough; wire angle, 30°. 90.60

0	13.81	33.51	4.56	0	13.81	33.51	4.56	25.10	287.5	0.000
10	13.84	33.53	5.30	10	13.84	33.53	5.30	25.10	287.1	0.029
22	13.74	33.51	5.65	20	13.76	33.51	5.64	25.11	287.1	0.057
48	12.37	33.40	5.90	30	13.30	33.48	5.78	25.18	280.6	0.086
70	11.78	33.37	5.89	50	12.30	33.39	5.90	25.30	269.0	0.141
94	10.26	33.49	5.89	75	11.62	33.37	5.89	25.42	258.9	0.207
136	8.86	33.82	2.73	100	9.77	33.57	5.85	25.90	213.5	0.266
176	8.30	33.99	2.16	150	8.65	33.93	2.40	26.36	170.5	0.362
256	6.70	33.99	2.65r	200	7.90	33.99	(2.00)	26.52	155.9	0.443
345	6.02	34.07	1.36	250	6.55	33.99	(1.80)	26.71	138.1	0.517
429	6.19	34.23	0.62	300	6.16	34.01	(1.63)	26.77	132.3	0.584
515	5.84	34.35	0.65	400	6.16	34.18	0.75	26.91	121.0	0.711
689	4.98	34.25r	0.51u	500	5.94	34.33	0.65	27.05	108.3	0.825
873	4.36	34.42	0.54	600	5.39	34.38	(0.62)	27.16	98.8	0.929
1066	3.78	34.45	0.82	700	4.94	34.40	(0.60)	27.23	92.9	1.025
				800	4.58	34.41	(0.56)	27.28	88.7	1.116
				1000	3.98	34.44	0.72	27.36	81.0	1.286

S10

CCOFI 5006

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

90.70 CREST; June 13, 1950; 0043 GCT; 32°00'N, 120°44'W; sounding, 2,100 fm; wind, 340°, force 6; weather, cloudy; sea, rough; wire angle, 32°.

0	14.58	33.13	5.84	0	14.58	33.13	5.84	24.64	330.9	0.000
8	14.58	33.12	5.85	10	14.58	33.12	5.85	24.63	331.9	0.033
21	14.06	33.06	5.95	20	14.06	33.06	5.95	24.70	326.0	0.066
46	13.82	33.08	5.79	30	13.95	33.13	5.93	24.72	324.1	0.098
68	13.68	33.13	5.60	50	13.78	33.08	5.75	24.77	319.8	0.163
94	11.76	33.06	5.84	75	13.55	33.07	5.66	24.81	316.7	0.242
140	9.65	33.33	4.47	100	11.15	33.06	5.84	25.26	274.0	0.316
184	8.54	33.76	3.25	150	9.33	33.50	4.04	25.91	212.7	0.438
270	7.42	33.98	2.67	200	8.25	33.83	3.10	26.34	172.8	0.535
359	6.34	34.00	1.97	250	7.62	33.95	2.78	26.53	155.7	0.616
445	5.45	34.04	1.28	300	7.14	34.00	2.46	26.63	146.0	0.692
532	4.96	34.14	0.74	400	5.84	34.01	1.63	26.81	129.5	0.829
707	4.88	-	-	500	5.12	34.10	0.91	26.97	115.2	0.951
892	4.21	34.43	0.62	600	4.90	(34.24)	(0.54)	(27.11)	(103.4)	(1.062)
1084	3.58	34.45	0.79	700	4.88	(34.37)	(0.50)	(27.21)	(94.2)	(1.159)
				800	4.60	(34.41)	(0.56)	(27.28)	(89.1)	(1.252)
				1000	3.84	34.45	0.71	27.39	78.6	(1.420)

90.80 CREST; June 12, 1950; 1930 GCT; 31°39'N, 121°21'W; sounding, 2,040 fm; wind, 330°, force 5; weather, cloudy; sea, rough; wire angle, 20°.

0	15.35	33.12	5.59	0	15.35	33.12	5.59	24.47	347.3	0.000
9	15.34	33.12	5.52	10	15.32	33.12	5.52	24.47	347.0	0.035
23	15.24	33.13	5.52	20	15.25	33.13	5.52	24.50	345.0	0.069
51	14.88	33.13	5.55	30	15.11	33.13	5.54	24.53	342.4	0.104
75	15.05	33.13	5.60	50	14.89	33.13	5.55	24.58	338.4	0.172
103	13.69a)	33.21	5.92	75	15.05	33.13	5.60	24.54	342.4	0.257
155	10.54	33.15	5.41	100	13.73	33.20	5.92	24.87	311.3	0.338
205	8.98	33.60	3.71	150	10.95	25.37	5.50	25.37	265.0	0.482
304	7.46	33.95	3.49r	200	9.10	33.54	3.87	25.98	207.1	0.600
408	6.40	34.05	1.01	250	8.11	33.84	(2.69)	26.37	170.9	0.695
508	5.34	34.05	0.96	300	7.50	33.94	(1.85)	26.54	155.5	0.777
607	4.88	34.16	0.76	400	6.46	34.05	(1.04)	26.76	134.6	0.922
806	4.27	34.33	0.57	500	5.44	34.05	0.94	26.89	122.7	1.051
1009	3.78	34.40	0.76	600	4.90	34.15	0.77	27.04	109.8	1.167
1210	3.33	34.45	0.87	700	4.62	34.27	0.64	27.16	98.5	1.270
				800	4.29	34.33	0.57	27.25	91.1	1.366
				1000	3.79	34.40	0.75	27.35	81.7	1.539

90.90 CREST; June 12, 1950; 1417 GCT; 31°20'N, 122°02'W; sounding, 2,150 fm; wind, 320°, force 4; weather, cloudy; sea, rough; wire angle, 30°.

0	15.77	33.24	5.35	0	15.77	33.24	5.35	24.46	347.8	0.000
10	15.76	33.22	5.05	10	15.76	33.22	5.05	24.45	349.8	0.035
22	15.57	33.22	5.16	20	15.64	33.22	5.16	24.48	346.7	0.070
48	15.70	33.37	5.03	30	15.56	33.24	5.11	24.51	343.8	0.104
68	16.09	33.51	5.07	50	15.75	33.40	5.02	24.59	336.7	0.172
93	14.72	33.46	5.10	75	16.08	33.50	5.09	24.60	337.3	0.256
137	13.29	33.64	4.91	100	14.49	33.46	5.07	24.92	307.4	0.337
180	10.56	33.66	4.26	150	12.90	33.65	4.79	25.39	263.5	0.480
268	8.31	33.89	3.22	200	9.90	33.70	4.00	25.97	208.0	0.598
358	7.02	34.00	2.07	250	8.64	33.84	3.40	26.29	178.8	0.695
445	6.08	34.07	1.22	300	7.81	33.94	2.84	26.49	160.0	0.779
531	5.65	34.13	0.92	400	6.52	34.04	1.58	26.75	136.1	0.927
700	4.65	34.27	0.43	500	5.77	34.11	0.99	26.90	122.4	1.057
871	4.10	34.36	0.58	600	5.34	34.19	0.69	27.02	112.2	1.174
1052	3.78	34.43	0.60	700	4.65	34.27	0.44	27.16	99.0	1.280
				800	4.28	34.33	0.53	27.25	91.0	1.375
				1000	3.87	34.41	0.60	27.35	82.0	1.547

a) Alternate value, 13.97°C, not used in interpolation.

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

CREST; June 12, 1950; 0904 GCT; 31°02'N, 122°41'W; sounding, 2,100 fm; wind, 320°, force 3; weather, cloudy; sea, rough; wire angle, 20°. 90.100

0	16.19	33.29	5.37	0	16.19	33.29	5.37	24.41	353.0	0.000
10	16.20	33.30	5.68	10	16.20	33.30	5.68	24.42	352.5	0.035
24	15.99	33.30	5.63	20	16.02	33.30	5.64	24.46	348.9	0.070
51	15.76	33.33	5.55	30	15.95	33.30	5.60	24.47	347.7	0.105
74	16.06	33.55	5.29	50	15.75	33.33	5.56	24.54	341.8	0.174
102	15.03 a)	33.57	5.13	75	16.06	33.55	5.28	24.64	333.2	0.258
150	12.70	33.57	4.92	100	15.10	33.57	5.14	24.87	312.0	0.339
198	10.13	33.62	4.58	150	12.70	33.57	4.92	25.37	265.6	0.483
294	8.14	33.96	3.60	200	10.10	33.63	4.56	25.89	216.4	0.604
396	6.92	34.04	1.85	250	8.82	33.87	4.13	26.28	179.3	0.703
494	6.11	34.14	0.85	300	8.03	33.97	3.51	26.48	160.9	0.788
593	5.58	34.20	0.76	400	6.87	34.04	1.77	26.70	140.9	0.939
791	4.46	34.34	0.41	500	6.08	34.14	0.83	26.88	124.2	1.072
996	3.82	34.43	0.62	600	5.53	34.21	0.75	27.01	113.2	1.191
1198	3.35	34.49	0.86	700	4.94	34.27	0.55	27.13	102.4	1.297
				800	4.43	34.35	0.40	27.25	91.3	1.394
				1000	3.82	34.43	0.63	27.37	79.9	1.566

CREST; June 12, 1950; 0351 GCT; 30°43'N, 123°21'W; sounding, 2,100 fm; wind, 340°, force 4; weather, partly cloudy; sea, rough; wire angle, 31°. 90.110

0	16.61	33.44	5.71	0	16.61	33.44	5.71	24.43	350.8	0.000
9	16.56	33.42	5.70	10	16.50	33.42	5.70	24.44	350.3	0.035
26	16.14	33.42	5.90	20	16.19	33.42	5.86	24.51	343.9	0.070
44	16.09	33.51	5.48	30	16.10	33.42	5.88	24.53	342.2	0.104
64	16.17	33.53	5.60	50	16.11	33.52	5.48	24.61	335.7	0.172
84	-	33.53	4.92r	75	15.70	33.53	5.60	24.71	326.9	0.255
124	13.68	33.37	5.37	100	14.50	33.48	5.57	24.93	306.2	0.334
158	12.68	33.51	5.63r	150	12.97	33.47	5.14	25.23	278.1	0.480
232	9.37	33.78	4.32	200	10.52	33.68	4.64	25.85	219.8	0.604
312	7.90	34.00	2.67	250	8.95	33.84	4.00	26.24	183.5	0.705
390	6.91	34.07	1.93	300	8.07	33.97	2.90	26.48	161.5	0.791
474	6.20	34.11	1.29	400	6.82	34.07	1.85	26.73	137.9	0.941
646	5.22	34.20	0.60	500	6.03	34.12	1.15	26.88	125.1	1.073
824	4.58	34.38	0.46	600	5.46	34.18	0.74	26.99	114.5	1.192
1019	3.90	34.47	0.76	700	5.00	34.24	0.50	27.09	105.4	1.302
				800	4.65	34.35	0.45	27.22	94.0	1.402
				1000	3.96	34.47	0.70	27.39	78.6	1.574

CREST; June 11, 1950; 2238 GCT; 30°24'N, 124°02'W; sounding, 2,250 fm; wind, 360°, force 3; weather, cloudy; sea, rough; wire angle, 4°. 90.120

0	17.35	33.66	4.84	0	17.35	33.66	4.84	24.42	351.8	0.000
10	16.80	33.61	5.48	10	16.80	33.61	5.48	24.52	342.9	0.035
25	16.68	33.68	5.55	20	16.70	33.63	5.55	24.55	339.7	0.069
50	16.90	33.82	5.35	30	16.70	33.70	5.53	24.61	334.9	0.102
75	17.26	33.91	5.33	50	16.90	33.82	5.35	24.65	331.3	0.169
100	-	34.22	5.25	75	17.26	33.91	5.33	24.64	333.4	0.252
154	14.03	33.93	5.14	100	17.30	34.22	5.25	24.87	312.9	0.333
203	10.96	33.71	4.64	150	14.30	33.92	5.16	25.32	270.6	0.479
300	7.89	34.02	2.73	200	11.13	33.71	4.69	25.78	227.3	0.604
402	6.48	34.05	1.63	250	9.17	33.84	3.72	26.20	187.0	0.708
500	5.17	34.18	0.65	300	7.89	34.02	2.73	26.54	155.5	0.793
603	5.27	34.27	0.60	400	6.50	34.05	1.65	26.76	135.1	0.938
803	4.48	34.34	0.52	500	5.17	34.18	0.65	27.03	109.7	1.061
999	3.89	34.45	0.69	600	5.28	34.27	0.60	27.09	105.6	1.168
1200	3.43	34.50	1.03	700	4.90	34.31	0.59	27.16	99.0	1.270
				800	4.48	34.34	0.54	27.23	92.6	1.366
				1000	3.89	34.45	0.69	27.38	79.2	1.538

a) Alternate value, 15.31°C, not used in interpolation.

SIO

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5006

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

9330 CREST; June 18, 1950; 1238 GCT; 32°47'N, 117°31'W; sounding, 390 fm; wind, 270°, force 1; weather, overcast; sea, moderate; wire angle, 0°.

0	17.16	33.64	5.49	0	17.16	33.64	5.49	24.45	348.7	0.000
10	15.54	33.60	5.76	10	15.54	33.60	5.76	24.79	316.5	0.033
25	11.30	33.53	4.54	20	11.85	33.54	5.00	25.50	249.2	0.062
50	9.90	33.73	3.08	30	10.72	33.53	4.06	25.70	230.6	0.086
75	9.41	33.86	2.60	50	9.90	33.73	3.08	25.99	203.1	0.129
100	9.09	33.96	2.60	75	9.41	33.86	2.60	26.18	185.9	0.177
153	8.60	34.07	2.17	100	9.09	33.96	2.60	26.31	173.9	0.222
201	8.60	34.26	1.61	150	8.60	34.07	2.19	26.47	159.4	0.305
250	7.98	34.15	1.28	200	8.60	34.26	1.61	26.61	147.0	0.383
299	7.76	34.25	0.90	250	7.98	34.15	1.28	26.63	146.0	0.455
353	7.44	34.25	0.65	300	7.76	34.25	0.88	26.74	136.3	0.526
402	7.15	34.31	0.57	400	7.16	34.31	0.57	26.87	124.9	0.657
451	6.88	34.34	-							

9340 CREST; June 18, 1950; 1751 GCT; 32°29'N, 118°13'W; sounding, 850 fm; wind, 270°, force 2; weather, overcast; sea, rough; wire angle, 20°.

0	16.02	33.60	5.69	0	16.02	33.60	5.69	24.69	326.5	0.000
10	16.00	33.58	5.91	10	16.00	33.58	5.91	24.68	327.8	0.033
28	15.13	33.55	5.70	20	15.80	33.56	5.85	24.71	325.2	0.065
47	11.48	33.46	5.46	30	15.00	33.54	5.67	24.87	310.1	0.097
71	10.40	33.53	4.39	50	11.27	33.46	5.35	25.55	245.5	0.153
93	9.38	33.75	3.47	75	10.72	33.56	4.15	25.73	229.3	0.212
142	8.85	33.95	2.60	100	9.30	33.80	3.26	26.15	189.1	0.264
184	8.33	34.04	2.21	150	8.75	33.97	2.53	26.37	169.0	0.354
272	7.51	34.16	1.26	200	8.14	34.07	2.04	26.54	153.4	0.434
365	7.00	34.23	0.70	250	7.69	34.14	1.49	26.67	142.6	0.509
456	6.32	34.27	0.60	300	7.33	34.18	1.03	26.75	135.3	0.578
552	5.76	34.25u	0.62u	400	6.76	34.25	0.64	26.88	123.8	0.707
743	4.87	34.36	0.47	500	6.07	(34.29)	(0.56)	(27.00)	(113.0)	(0.826)
934	4.22	34.36	0.56	600	5.51	(34.33)	(0.52)	(27.11)	(104.0)	(0.934)
1135	3.84	34.45	0.72	700	5.05	(34.36)	(0.48)	(27.19)	(96.1)	(1.034)
				800	4.66	34.36	0.50	27.23	93.4	(1.129)
				1000	4.06	34.38	0.61	27.31	86.5	(1.310)

9350 CREST; June 18, 1950; 2304 GCT; 32°10'N, 118°53'W; sounding, 650 fm; wind, 320°, force 6; weather, overcast; sea, very rough; wire angle, 27°.

0	14.89	33.60	5.23	0	14.89	33.60	5.23	24.94	302.2	0.000
9	14.88	33.62	5.07	10	14.88	33.62	5.07	24.95	301.3	0.030
22	14.87	33.62	5.47	20	14.87	33.62	5.47	24.96	301.3	0.060
44	9.66	33.69	3.01	30	14.79	33.62	5.00	24.97	300.0	0.090
67	9.20	33.89	2.74	50	9.54	33.75	2.92	26.07	195.6	0.140
89	8.82	33.98	2.38	75	9.07	33.92	2.62	26.28	176.2	0.186
136	8.42	34.09	2.03	100	8.69	34.02	2.24	26.42	163.5	0.229
179	8.04	34.11	1.65	150	8.30	34.10	1.94	26.54	152.7	0.308
264	7.34	34.20	1.02	200	7.82	34.13	1.44	26.64	144.4	0.382
354	6.74	34.23	0.68	250	7.42	34.18	1.11	26.74	135.8	0.452
441	6.21	34.23	0.50	300	7.07	34.22	0.85	26.82	128.8	0.519
534	5.81	34.27	0.56	400	6.45	34.23	0.57	26.91	121.1	0.643
718	5.04	34.40	0.42	500	5.93	34.25	0.52	26.99	114.1	0.761
903	4.40	34.43	0.50	600	5.52	34.32	0.55	27.10	104.9	0.871
1102	3.75	34.51	0.65	700	5.11	34.39	0.44	27.20	95.7	0.971
				800	4.77	34.42	0.45	27.26	90.3	1.064
				1000	4.05	34.47	0.57	27.38	79.7	1.234

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

CREST; June 19, 1950; 0417 GCT; 31°51'N, 119°36'W; sounding, 1,000 fm; wind, 320°, force 6; weather, overcast; sea, high; wire angle, 42°. 93.60

0	13.93	33.49	6.11	0	13.93	33.49	6.11	25.06	291.4	0.000
8	13.92	33.49	6.27	10	13.91	33.49	6.28	25.06	291.2	0.029
22	13.90	33.51	5.93	20	13.90	33.50	5.95	25.07	290.6	0.058
41	13.41	33.58	5.88	30	13.88	33.55	5.89	25.11	286.8	0.087
58	11.40	33.48	6.05	50	12.65	33.48	5.98	25.31	268.9	0.143
79	10.32	33.57	4.35a)	75	10.32	33.55	4.75	25.79	223.4	0.204
120	9.19	33.75	2.77	100	9.58	33.67	3.18	26.00	203.1	0.257
202	7.88	34.00	2.62	150	8.63	33.85	2.74	26.30	176.1	0.352
290	7.42	34.20	1.11	200	7.89	33.99	2.65	26.52	155.7	0.435
376	6.72	34.20	0.75	250	7.59	34.15	1.85	26.69	140.4	0.509
464	6.04	34.22	0.70	300	7.37	34.20	1.03	26.76	134.4	0.578
643	5.26	34.34	0.54	400	6.50	34.20	0.72	26.88	124.0	0.707
832	4.47	34.40	0.59	500	5.84	34.24	0.67	26.99	113.7	0.826
1024	3.90	34.43	0.69	600	5.41	34.31	0.57	27.10	104.2	0.935
				700	5.05	34.37	0.55	27.19	96.4	1.035
				800	4.62	34.40	0.58	27.26	89.9	1.128
				1000	3.96	34.42	0.69	27.35	82.3	1.301

CREST; June 19, 1950; 0932 GCT; 31°32'N, 120°16'W; sounding, 2,050 fm; wind, 320°, force 5; weather, overcast; sea, very rough; wire angle, 32°. 93.70

0	14.71	33.22	5.91	0	14.71	33.22	5.91	24.68	326.8	0.000
9	14.70	33.22	6.03	10	14.69	33.22	6.02	24.69	326.6	0.033
22	14.69	33.22	5.61	20	14.69	33.22	5.63	24.69	326.5	0.065
47	14.70	33.25	5.62	30	14.69	33.22	5.60	24.69	327.0	0.098
67	13.82	33.40	5.76	50	14.45	33.25	5.65	24.76	320.7	0.163
90	12.16	33.30	5.28	75	13.75	33.37	5.73	25.00	298.6	0.240
131	10.05	33.57	3.64	100	11.32	33.32	4.77	25.43	257.8	0.310
168	9.20	33.82	2.66	150	9.60	33.71	3.02	26.03	201.4	0.425
244	8.16	34.07	1.77	200	8.71	33.96	2.24	26.37	170.1	0.517
325	7.46	34.14	1.13	250	8.11	34.07	1.73	26.55	153.9	0.598
406	6.68	34.20	0.75	300	7.67	34.13	1.30	26.66	143.9	0.673
489	6.13	34.24	0.59	400	6.74	34.19	0.77	26.84	128.0	0.809
659	5.19	34.33	0.45	500	6.06	34.25	0.57	26.97	115.8	0.931
842	4.41	34.38	0.51	600	5.50	34.30	0.49	27.08	106.1	1.042
1032	3.84	34.47	0.68	700	4.99	34.35	0.45	27.18	97.1	1.144
				800	4.55	34.37	0.49	27.25	91.3	1.238
				1000	3.90	34.45	0.65	27.38	79.4	1.408

CREST; June 19, 1950; 1445 GCT; 31°13'N, 120°56'W; sounding, 2,075 fm; wind, 320°, force 6; weather, overcast; sea, high; wire angle, 49°. 93.80

0	14.89	33.53	5.64	0	14.89	33.53	5.64	24.89	307.6	0.000
7	14.88	33.42	6.03	10	14.88	33.42	6.02	24.80	315.7	0.031
20	14.87	33.42	5.64	20	14.87	33.42	5.64	24.80	316.0	0.063
40	14.90	33.43	6.14	30	14.88	33.42	5.84	24.80	316.4	0.094
60	13.23	33.44	6.45	50	14.65	33.44	6.33	24.87	310.8	0.157
80	11.76	33.44	5.29	75	12.20	33.44	5.51	25.36	264.1	0.229
179p	8.80	33.96	2.89	100	10.68	33.48	4.43	25.67	235.1	0.291
274p	7.38	34.05	2.39	150	9.24	33.79	3.27	26.15	189.9	0.398
378p	6.43	34.18	1.01	200	8.43	34.00	2.73	26.45	162.9	0.486
480p	5.94	-	-	250	7.67	34.04	2.48	26.59	149.7	0.564
699p	4.93	34.38	0.36	300	7.08	34.07	2.17	26.70	140.0	0.636
916p	4.20	34.47	0.68	400	6.30	(34.20)	(0.85)	(26.90)	(121.3)	(0.767)
1129p	3.57	34.52	0.87	500	5.87	(34.28)	(0.53)	(27.02)	(111.1)	(0.883)
				600	5.42	(34.34)	(0.39)	(27.12)	(102.1)	(0.990)
				700	4.91	34.38	0.35	27.22	93.7	(1.088)
				800	4.52	34.43	0.47	27.30	86.5	(1.178)
				1000	3.94	34.48	0.80	27.40	77.6	(1.342)

a) Alternate value, 4.61 ml/L, not used in interpolation.

S10

CCOFI 5006

	OBSERVED					INTERPOLATED					COMPUTED		
	Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
	m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
93.90	CREST; June 19, 1950; 1958 GCT; 30°54'N, 121°38'W; sounding, 2,100 fm; wind, 320°, force 5; weather, overcast; sea, very rough; wire angle, 25°.												
	0	14.85	33.15	4.68		0	14.85	33.15	4.68		24.60	334.8	0.000
	9	14.84	33.13	4.95		10	14.83	33.13	4.95		24.59	336.1	0.034
	27	14.83	33.12	4.36		20	14.82	33.12	4.57		24.58	336.9	0.067
	54	14.78	33.13	4.00		30	14.82	33.12	4.32		24.58	337.2	0.101
	81	13.73	33.19	5.29		50	14.78	33.13	4.02		24.60	336.2	0.168
	107	11.88	33.10	4.81		75	13.98	33.14	5.25		24.78	320.0	0.250
	159	9.86	33.51	3.81		100	12.28	33.11	4.98		25.09	290.4	0.327
	208	8.59	33.86	3.08		150	10.12	33.40	3.97		25.70	232.7	0.457
	306	7.18	34.04	1.93		200	8.78	33.82	3.18		26.25	181.5	0.561
	411	6.52	34.18	0.98		250	7.88	33.95	2.52		26.49	159.4	0.646
	503	6.10	34.28	0.51		300	7.24	34.03	1.98		26.64	145.2	0.722
	600	5.60	-	-		400	6.56	34.16	1.06		26.85	127.9	0.858
	806	4.69	34.39	0.44		500	6.10	34.27	0.51		26.98	114.9	0.980
	1012	4.02	34.49	0.57		600	5.60	(34.32)	(0.45)		(27.09)	(105.8)	(1.090)
	1219	3.43	34.49	0.77		700	5.08	(34.35)	(0.44)		(27.17)	(98.3)	(1.192)
						800	4.71	(34.38)	(0.45)		(27.24)	(92.5)	(1.287)
						1000	4.05	34.48	0.55		27.39	78.9	(1.459)
97.32	CREST; June 21, 1950; 1113 GCT; 32°11'N, 117°18'W; sounding, 715 fm; wind, 040°, force 1; weather, overcast; sea, moderate; wire angle, 4°.												
	0	16.65	33.66	5.58		0	16.65	33.66	5.58		24.59	335.8	0.000
	10	16.46	33.58	5.94		10	16.46	33.58	5.94		24.57	337.8	0.034
	25	12.64	33.57	5.66		20	14.05	33.57	5.78		25.09	288.4	0.065
	50	10.80	33.57	4.59		30	11.75	33.57	5.50		25.55	245.4	0.092
	74	10.17	33.64	3.37		50	10.80	33.57	4.59		25.72	229.7	0.139
	99	9.32	33.80	2.99		75	10.13	33.64	3.37		25.89	213.6	0.195
	153	8.71	34.05	2.45		100	9.28	33.81	2.98		26.16	188.0	0.245
	203	8.14	34.09	2.18		150	8.75	34.04	2.49		26.43	163.8	0.333
	303	7.61	34.23	1.10		200	8.18	34.09	2.20		26.55	152.5	0.412
	406	7.01	34.34	0.56		250	7.78	34.14	1.77		26.65	143.9	0.486
	502	6.36	34.36	0.56		300	7.62	34.22	1.13		26.74	136.5	0.556
	605	5.70	-	-		400	7.08	34.33	0.56		26.90	122.3	0.685
	806	4.79	34.42	0.44		500	6.37	34.36	0.56		27.02	111.8	0.802
	1004	4.10	34.49	0.78		600	5.73	(34.37)	(0.52)		(27.11)	(103.9)	(0.911)
	1208	3.55	34.58	0.83		700	5.23	(34.39)	(0.48)		(27.19)	(97.2)	(1.012)
						800	4.81	(34.42)	(0.45)		(27.26)	(90.8)	(1.105)
						1000	4.11	34.49	0.77		27.39	78.9	(1.275)
97.40	CREST; June 21, 1950; 0527 GCT; 31°56'N, 117°52'W; sounding, 780 fm; wind, 270°, force 1; weather, overcast; sea, rough; wire angle, 3°.												
	0	15.62	33.46	5.02		0	15.62	33.46	5.02		24.67	328.1	0.000
	10	15.46	33.53	4.59		10	15.46	33.53	4.59		24.76	319.7	0.032
	25	15.35	33.54	5.35		20	15.36	33.54	5.30		24.79	317.4	0.064
	55	12.20a)	33.44	5.22		30	15.30	33.53	5.35		24.79	317.1	0.096
	80	11.15	33.53	3.78		50	12.50	33.44	5.27		25.30	269.0	0.155
	109	9.89	33.68	3.26		75	11.35	33.50	3.97		25.57	244.5	0.219
	163	8.67	33.93	3.10		100	10.30	33.63	3.38		25.85	217.7	0.277
	218	7.84	34.05	2.50		150	8.90	33.88	3.15		26.28	178.0	0.376
	326	7.30	34.20	0.93		200	8.10	34.02	2.82		26.51	156.6	0.459
	440	6.56	34.27	0.59		250	7.60	34.10	1.90		26.65	144.3	0.535
	548	5.83	34.34	0.41		300	7.37	34.17	1.13		26.73	136.6	0.604
	657	5.30	34.36	0.39		400	6.86	34.25	0.65		26.87	125.2	0.735
	870	4.57	34.43	0.60		500	6.14	34.31	0.49		27.01	112.4	0.854
	1084	3.92	34.50	0.60		600	5.55	34.35	0.39		27.12	103.1	0.962
	1289	3.41	34.56	0.77		700	5.12	34.37	0.41		27.18	97.3	1.062
						800	4.78	34.40	0.52		27.25	91.9	1.156
						1000	4.18	34.48	0.60		27.38	80.5	1.329

a) Alternate value, 12.78°C, not used in interpolation.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

CREST; June 21, 1950; 0041 GCT; 31°31'N, 118°28'W; sounding, 825 fm; wind, 270°, force 1; weather, overcast; sea, moderate; wire angle, 16°. 97.50

0	15.77	33.53	5.75	0	15.77	33.53	5.75	24.69	326.2	0.000
10	15.46	33.52	5.53	10	15.46	33.52	5.53	24.75	320.9	0.032
24	15.43	33.56	5.59	20	15.45	33.55	5.55	24.78	318.5	0.064
53	12.76	33.44	5.73	30	15.42	33.56	5.64	24.79	317.5	0.096
76	10.92	33.51	4.65	50	12.96	33.44	5.74	25.21	277.6	0.156
104	9.82	33.58	3.85	75	11.00	33.50	4.90	25.63	238.5	0.220
156	8.87	33.98	2.75	100	9.95	33.57	3.90	25.87	216.4	0.277
207	8.26	34.05	2.27	150	8.97	33.94	2.85	26.31	174.6	0.375
308	7.26	34.20	1.28	200	8.35	34.04	2.34	26.49	158.7	0.458
414	6.60	34.23	0.68	250	7.81	34.13	1.85	26.64	145.1	0.534
516	6.02	34.31	0.49	300	7.35	34.19	1.34	26.75	134.9	0.604
619	5.38	34.33	0.50	400	6.67	34.23	0.73	26.88	124.1	0.733
824	4.52	34.45	0.48	500	6.10	34.30	0.50	27.01	112.6	0.852
1033	3.87	34.49	0.73	600	5.50	34.33	0.50	27.11	103.9	0.960
1234	3.38	34.49	0.90	700	4.96	34.36	0.50	27.19	96.0	1.060
				800	4.59	34.43	0.48	27.29	87.3	1.151
				1000	3.96	34.49	0.67	27.41	77.1	1.317

CREST; June 20, 1950; 1955 GCT; 31°13'N, 119°09'W; sounding, 800 fm; wind, 320°, force 2; weather, overcast; sea, moderate; wire angle, 18°. 97.60

0	14.90	33.55	5.08	0	14.90	33.55	5.08	24.90	306.5	0.000
10	14.74	33.55	5.40	10	14.74	33.55	5.40	24.93	303.3	0.030
24	14.39	33.49	5.66	20	14.60	33.50	5.60	24.92	304.6	0.061
48	11.67	33.43	3.91r	30	14.17	33.47	5.68	24.99	298.4	0.091
71	11.02	33.31	4.78	50	11.55	33.42	5.37	25.47	253.4	0.146
94	10.27	33.63	3.52	75	10.92	33.31	4.57	25.50	251.1	0.209
145	8.65	33.91	2.89	100	10.00	33.69	3.43	25.95	208.3	0.267
191	8.36	34.13	1.58	150	8.61	33.94	2.76	26.37	169.1	0.361
282	7.48	34.17	1.11	200	8.30	34.14	1.50	26.57	150.6	0.441
377	6.70	34.23	0.54	250	7.85	34.16	1.23	26.66	143.4	0.515
469	6.12	34.27	0.53	300	7.31	34.18	1.00	26.75	135.1	0.584
565	5.62	-	-	400	6.55	34.24	0.54	26.90	121.7	0.712
756	4.74	34.40	0.44	500	5.97	(34.28)	(0.50)	(27.01)	(112.4)	(0.829)
947	4.02	34.49	0.59	600	5.45	(34.33)	(0.45)	(27.11)	(103.3)	(0.937)
1147	3.54	34.51	0.78	700	4.97	(34.37)	(0.45)	(27.20)	(95.4)	(1.036)
				800	4.58	34.42	0.45	27.28	87.9	(1.128)
				1000	3.84	34.50	0.69	27.43	74.9	(1.292)

CREST; June 20, 1950; 1409 GCT; 30°54'N, 119°50'W; sounding, 1,950 fm; wind, 320°, force 4; weather, overcast; sea, rough; wire angle, 9°. 97.70

0	13.67	33.26	5.59	0	13.67	33.26	5.59	24.93	303.2	0.000
10	13.64	33.22	5.82	10	13.64	33.22	5.82	24.91	306.0	0.030
25	13.66	33.31	5.94	20	13.66	33.29	5.92	24.96	301.3	0.061
54	13.16	33.39	5.72	30	13.64	33.32	5.94	24.98	298.9	0.091
79	11.82	33.40	5.34	50	13.37	33.38	5.78	25.09	289.8	0.150
108	10.36	33.53	3.85	75	11.90	33.40	5.43	25.39	261.6	0.219
162	8.55	33.93	3.71	100	11.00	33.47	3.95	25.61	241.3	0.281
215	7.90	34.02	3.35	150	8.78	33.86	3.73	26.28	177.6	0.386
320	7.32	34.22	1.41	200	8.05	34.00	3.50	26.50	157.3	0.470
431	6.53	34.27	0.63	250	7.65	34.10	2.83	26.64	145.0	0.546
536	5.90	34.36	0.57	300	7.39	34.19	1.74	26.75	135.4	0.615
641	5.23	-	-	400	6.80	34.26	0.73	26.88	123.6	0.745
850	4.48	34.42	0.51	500	6.11	34.34	0.58	27.04	109.8	0.862
1059	3.80	34.51	0.68	600	5.48	(34.37)	(0.55)	(27.14)	(100.7)	(0.967)
1261	3.34	34.49	0.92	700	4.96	(34.37)	(0.52)	(27.20)	(95.3)	(1.065)
				800	4.62	(34.40)	(0.51)	(27.26)	(89.9)	(1.157)
				1000	3.98	34.50	0.60	27.41	76.6	(1.325)

SIO

CCOFI 5006

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
97.80	CREST; June 20, 1950; 0823 GCT; 30°35'N, 120°31'W; sounding, 1,950 fm; wind, 320°, force 4; weather, drizzle; sea, very rough; wire angle, 28°.											
0	15.60	33.55	4.81		0	15.60	33.55	4.81		24.74	321.1	0.000
9	15.59	33.48	5.38		10	15.58	33.48	5.36		24.69	326.1	0.032
27	15.57	33.49	4.68		20	15.57	33.48	4.90		24.70	326.2	0.065
53	13.80	33.44	5.38		30	15.56	33.48	4.69		24.70	326.3	0.098
80	11.45	33.48	4.48		50	14.20	33.44	5.36		24.96	301.7	0.160
106	9.92	33.58	3.97		75	11.80	33.46	4.63		25.45	255.4	0.230
158	8.85	33.87	2.56		100	10.13	33.55	4.06		25.82	220.8	0.290
210	8.14	33.95	2.59		150	8.98	33.84	2.65		26.23	182.1	0.390
314	7.19	34.14	1.25		200	8.27	33.94	2.59		26.42	165.0	0.477
412	6.40	34.22	0.96		250	7.73	34.00	2.34		26.55	153.5	0.557
516	5.73	34.29	0.41		300	7.28	34.11	1.45		26.70	139.8	0.630
615	5.15	-	-		400	6.49	34.21	0.98		26.89	123.1	0.761
822	4.40	34.42	0.42		500	5.82	34.28	0.49		27.03	110.5	0.878
1029	3.82	34.47	0.68		600	5.23	(34.33)	(0.42)		(27.14)	(100.5)	(0.984)
1235	3.34	34.51	0.80		700	4.79	(34.37)	(0.42)		(27.22)	(93.2)	(1.080)
					800	4.46	(34.41)	(0.43)		(27.29)	(87.2)	(1.171)
					1000	3.90	34.47	0.64		27.40	77.9	(1.336)
97.90	CREST; June 20, 1950; 0237 GCT; 30°16'N, 121°12'W; sounding, 2,100 fm; wind, 320°, force 5; weather, overcast; sea, very rough; wire angle, 36°.											
0	16.48	33.53	5.81		0	16.48	33.53	5.81		24.53	341.4	0.000
8	16.47	33.53	5.61		10	16.47	33.53	5.53		24.53	341.7	0.034
25	16.47	33.53	5.34		20	16.46	33.53	5.33		24.53	341.7	0.068
49	16.42	33.53	5.37		30	16.45	33.53	5.33		24.54	341.8	0.102
73	14.00	33.37	5.90		50	16.40	33.53	5.38		24.55	341.3	0.171
97	12.82	33.49	5.55		75	13.96	33.37	5.90		24.96	302.7	0.251
144	10.42	33.55	4.45		100	12.67	33.50	5.47		25.32	269.0	0.323
190	9.21	33.82	3.25		150	10.18	33.56	4.30		25.82	221.9	0.446
280	7.86	34.07	1.96		200	9.03	33.88	3.05		26.26	180.9	0.546
366	7.19	34.16	1.28		250	8.26	34.03	2.30		26.49	159.0	0.631
459	6.39	34.23	0.71		300	7.69	34.09	1.75		26.63	147.1	0.708
550	6.00	-	-		400	6.90	34.19	1.06		26.82	130.2	0.846
740	4.88	34.38	0.50		500	6.17	(34.25)	(0.63)		(26.96)	(117.3)	(0.970)
935	4.14	34.43	0.63		600	5.75	(34.31)	(0.53)		(27.06)	(108.6)	(1.083)
1136	3.62	34.45	0.83		700	5.15	(34.36)	(0.51)		(27.17)	(98.4)	(1.186)
					800	4.59	34.40	0.51		27.27	89.5	(1.280)
					1000	3.93	34.43	0.70		27.36	81.2	(1.452)
100.30	PAOLINA-T; June 23, 1950; 1027 GCT; 31°40.5'N, 116°46.5'W; sounding, 240 fm; wind, 310°, force 3; weather, overcast; sea, rough; wire angle, 4°.											
0	16.88		5.25	0.35	0	16.88		5.25	0.35			
10	15.08		5.97	0.42	10	15.08		5.97	0.42			
25	11.98		4.77	0.75	20	12.38		5.15	0.60			
50	10.69		4.27	1.41	30	11.77		4.70	0.88			
75	9.56		3.07	1.75	50	10.69		4.27	1.41			
100	9.04		2.78	1.96	75	9.56		3.07	1.75			
154	8.88		1.82	2.30	100	9.04		2.78	1.96			
204	8.72		1.24	2.46	150	8.89		1.90	2.28			
254	8.28		1.17	2.49	200	8.74		1.27	2.44			
304	8.06		0.90	2.63	250	8.31		1.19	2.48			
358	7.68		0.71	2.64	300	8.07		0.94	2.62			

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

PAOLINA-T; June 23, 1950; 0032 GCT; 30°09'N, 116°33'W; sounding, 800 fm; wind, 320°, force 3; weather, cloudy; sea, very rough; wire angle, 20°. 105.35

0	15.43	5.51	0.40	0	15.43	5.51	0.40
10	16.10	5.85	0.40	10	16.10	5.85	0.40
24	14.02	6.08	0.52	20	16.10	6.05	0.45
47	11.29	4.56	1.19	30	13.13	6.05	0.63
71	10.23	3.44	1.67	50	11.16	4.23	1.30
94	9.50	3.34	1.82	75	10.05	3.45	1.70
146	8.99	2.39	2.10	100	9.42	3.32	1.86
193	8.55	2.23	2.20	150	8.95	2.39	2.09
287	7.84	1.20	2.54	200	8.50	2.24	2.22
386	7.06	0.73	2.85	250	8.13	1.75	2.38
480	6.71	0.61	2.98	300	7.72	1.10	2.60
579	6.08	0.32	3.02	400	7.00	0.70	2.88
777	4.94	0.41	3.17	500	6.61	0.55	3.00
971	4.32	0.59	3.17	600	5.94	0.31	3.02
1172	3.56	0.84	3.14	700	5.31	0.39	3.11
				800	4.87	0.42	3.17
				1000	4.18	0.65	3.16

PAOLINA-T; June 22, 1950; 1538 GCT; 29°46.5'N, 116°00'W; sounding, 900 fm; wind, 290°, force 2; weather, overcast; sea, rough; wire angle, 17°. 110.35

0	15.61	5.24	0.39	0	15.61	5.24	0.39
10	15.50	5.25	0.42	10	15.50	5.25	0.42
24	15.23	5.37	0.46	20	15.27	5.36	0.44
48	12.93	5.50	0.66	30	15.22	5.44	0.50
72	11.44	4.66	1.04	50	12.70	5.50	0.68
96	10.05	3.82	1.55	75	11.26	4.54	1.11
148	8.95	2.99	2.06	100	9.82	3.71	1.58
196	8.28	2.54	2.52	150	8.93	2.98	2.09
289	7.36	1.24	2.67	200	8.25	2.50	2.53
387	7.00	0.60	2.96	250	7.65	1.82	2.63
481	6.48	0.55	3.02	300	7.30	1.12	2.67
580	5.94	0.35	3.16	400	6.94	0.64	2.98
774	4.98	0.52u	3.17	500	6.38	0.53	3.04
966	4.23	0.46	3.17	600	5.84	(0.35)	3.16
1165	3.72	0.69	3.13	700	5.34	(0.40)	3.16
				800	4.85	(0.40)	3.16
				1000	4.13	0.50	3.16

PAOLINA-T; June 22, 1950; 0909 GCT; 29°12'N, 115°39'W; sounding, 800 fm; wind, 300°, force 2; weather, overcast; sea, rough; wire angle, 18°. 113.35

0	16.30	5.41	0.37	0	16.30	5.41	0.37
10	16.20	5.28	0.39	10	16.20	5.28	0.39
24	15.96	5.49	0.40	20	16.01	5.46	0.40
47	15.24	5.51	0.42	30	15.87	5.50	0.40
71	12.93	5.25	0.65	50	15.10	5.50	0.43
95	11.86	4.93	0.90	75	12.91	5.21	0.69
147	9.14	3.14	1.88	100	10.90	4.81	0.96
193	8.48	2.37	2.16	150	9.10	3.07	1.94
287	7.71	1.62	2.47	200	8.39	2.32	2.18
384	7.45	0.85	2.86	250	7.89	1.90	2.34
476	7.14	0.38	3.04	300	7.67	1.55	2.52
574	6.30	0.35	3.17	400	7.40	0.74	2.90
767	5.14	0.46	3.16	500	7.00	0.38	3.07
959	4.37	0.53	3.16	600	6.03	0.36	3.17
1161	3.73	0.78	3.15	700	5.35	0.41	3.16
				800	5.04	0.47	3.16
				1000	4.20	0.57	3.16

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

117.35 PAOLINA-T; June 22, 1950; 0239 GCT; 28°37'N, 115°16'W; sounding, 100 fm; wind, 270°, force 2; weather, partly cloudy; sea, rough; wire angle, 10°.

0	15.96	5.70	0.32	0	15.96		5.70	0.32
10	12.80	4.04	1.03	10	12.80		4.04	1.03
25	10.62	2.94	1.61	20	11.00		2.96	1.55
49	9.91	3.03	1.66	30	10.43		2.94	1.62
74	9.60	1.92	2.17	50	9.90		3.04	1.66
98	9.76	1.60	2.28	75	9.61		1.88	2.17
148	10.00	0.88	2.55	100	9.78		1.55	2.30
				150	(10.01)		(0.83)	(2.56)

120.45 PAOLINA-T; June 21, 1950; 2114 GCT; 28°03'N, 114°54'W; sounding, 45 fm; wind, calm; weather, haze; sea, smooth; wire angle, 3°.

0	15.38	4.72	0.41	0	15.38		4.72	0.41
10	14.72	4.72	0.47	10	14.72		4.72	0.47
20	14.14	-	-	20	14.14		4.64	0.58
30	13.84	4.39	0.73	30	13.84		4.39	0.73
40	13.01	3.94	1.04	50	11.54			
50	11.54	-	-					
60	10.46	-	-					

120.35 PAOLINA-T; June 21, 1950; 1547 GCT; 27°43'N, 115°33'W; sounding, 1,200 fm; wind, 320°, force 2; weather, overcast; sea, rough; wire angle, 7°.

0	14.42	5.50	0.33	0	14.42		5.50	0.33
10	14.32	5.88	0.39	10	14.32		5.88	0.39
25	13.78	-	0.63	20	13.88		5.75	0.54
50	10.17	3.62	1.50	30	13.65		4.83	0.73
75	10.07	2.31	1.98	50	10.17		3.62	1.50
100	10.10	1.71	2.19	75	10.07		2.31	1.98
155	9.32	-	2.32	100	10.10		1.71	2.19
205	10.14	0.42	2.63	150	9.32		1.03	2.30
304	9.12	0.23	2.80	200	10.13		0.45	2.60
408	8.12	0.32u	2.88	250	9.74		0.25	2.74
508	6.96	0.23	3.01	300	9.15		0.24	2.80
613	6.29	0.26	3.04	400	8.19		0.23	2.88
817	5.06	0.40	3.04	500	7.03		0.24	3.00
1017	4.13	0.60	3.03 a)	600	6.37		0.26	3.04
1222	3.48	0.90	3.02 b)	700	5.75		0.31	3.04
				800	5.16		0.39	3.04
				1000	4.20		0.58	3.03

a) Alternate value, 3.17 µg at/L, not used in interpolation.
b) Alternate value, 3.17 µg at/L, not used in interpolation.

OBSERVED					INTERPOLATED					COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m

PAOLINA-T; June 21, 1950; 0438 GCT; 27°33'N, 115°52.5'W; sounding, 2,300 fm; wind, 320°, force 2; weather, overcast; sea, rough; wire angle, 12°. 120.50

0	15.79	-	0.31	0	15.79		(5.65)	0.31
10	15.52	5.65	0.31	10	15.52		5.65	0.31
25	15.02	6.00	0.31	20	15.39		6.08	0.31
49	12.26	4.92	0.88	30	14.30		6.07	0.32
73	10.57	4.13	1.35	50	12.20		4.91	0.91
97	9.85	3.08	1.72	75	10.45		4.10	1.38
150	10.03	1.53	2.31	100	9.87		2.87	1.77
197	9.20	1.39	3.50	150	10.03		1.53	2.31
292	8.57	0.96	2.63	200	9.18		1.38	2.51
391	7.59	0.50	2.86a)	250	8.78		1.19	2.58
486	6.92	0.26	2.98	300	8.50		0.92	2.64
587	6.18	0.26	3.00	400	7.51		0.48	2.88
785	5.08	0.33	3.17	500	6.80		0.27	2.98
981	4.28	0.55	3.15	600	6.10		0.27	3.00
1183	3.70	0.77	3.14	700	5.53		0.28	3.10
				800	5.00		0.34	3.17
				1000	4.22		0.58	3.15

PAOLINA-T; June 20, 1950; 1920 GCT; 27°13'N, 116°31.5'W; sounding, 2,100 fm; wind, 320°, force 3; weather, overcast; sea, rough; wire angle, 5°. 120.60

0	16.84	4.97	-	0	16.84		4.97	(0.40)
10	16.84	4.94	0.46	10	16.84		4.94	0.46
25	16.82	5.12	0.60	20	16.82		5.09	0.59
50	16.13	5.25	0.57	30	16.80		5.17	0.60
75	14.96	5.28	0.52	50	16.13		5.25	0.57
100	13.38	5.31	0.70	75	14.96		5.28	0.52
150	9.64	3.52	1.72	100	13.38		5.31	0.70
204	8.97	2.48	2.09	150	9.78		3.72	1.65
307	8.12	1.17	2.65	200	9.02		2.56	2.06
406	7.30	-	-	250	8.58		1.85	2.36
506	6.38	0.40	3.03b)	300	8.17		1.25	2.62
610	5.62	0.33	3.15	400	7.35		0.65	2.89
814	4.66	0.41	3.16	500	6.46		0.40	3.02
1014	3.94	0.70	3.14c)	600	5.68		0.34	3.15
1219	3.48	0.92	3.15	700	5.14		0.33	3.15
				800	4.72		0.40	3.16
				1000	3.98		0.68	3.14

PAOLINA-T; June 12, 1950; 1757, 1817 GCT; 27°18'N, 114°51.5'W; sounding, 350 fm; wind, 320°, force 5; weather, haze; sea, rough; wire angle, 17°, 20°. 123.40

0	14.28	33.69	5.04	0	14.28	33.69	5.04	25.13	284.0	0.000
10	12.51	33.62	4.48	10	12.51	33.62	4.48	25.44	255.2	0.027
24	11.26	33.62	4.05	20	11.35	33.62	4.15	25.66	234.5	0.051
48	10.72	33.66	3.37	30	11.01	33.63	3.88	25.73	228.1	0.075
72	10.66	34.14	1.82	50	10.72	33.67	3.25	25.81	220.7	0.119
96	10.96	34.40	0.90	75	10.68	34.21	1.65	26.24	180.7	0.170
148	10.90	34.47	0.32d)	100	10.98	34.41	0.81	26.34	171.6	0.214
197	10.69	34.51	0.69	150	10.89	34.47	0.31	26.40	167.2	0.298
				200	10.68	34.51	0.68	26.47	161.4	0.381
246	10.16	34.51	0.43	250	10.16	34.51	(0.44)	26.56	153.7	0.459
290p	10.02	34.52	-	300	9.95	34.52		26.61	150.5	0.536
352p	9.38	34.52	-							

a) Alternate value, 2.93 μg at/L, not used in interpolation.
b) Alternate value, 3.15 μg at/L, not used in interpolation.
c) Alternate value, 3.04 μg at/L, not used in interpolation.
d) Alternate value, 0.52 ml/L, not used in interpolation.

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

123.40 PAOLINA-T; June 20, 1950; 0653 GCT; 27°18'N, 114°51.5'W; sounding, 250 fm; wind, 320°, force 3; weather, clear; sea, rough; wire angle, 17°.

0	11.78	4.43	1.36	0	11.78	4.43	1.36
10	11.76	4.40	1.44	10	11.76	4.40	1.44
24	10.78	3.57	1.74	20	10.80	4.12	1.66
48	10.76	2.23	2.34	30	10.77	3.10	1.88
72	10.86	0.69	2.80	50	10.76	2.10	2.36
96	10.76	0.46	3.00	75	10.86	0.63	2.87
149	10.66	0.27	3.00	100	10.76	0.44	3.00
198	10.34	0.40	3.02	150	10.65	0.27	3.00
247	10.20	0.42	3.01	200	10.32	0.40	3.02
297	9.67	0.23	3.04	250	10.18	0.40	3.01
351	9.00	-	-	300	9.61	(0.21)	(3.04)
401	8.66	-	-	400	8.67		

123.50 PAOLINA-T; June 20, 1950; 0007 GCT; 26°58'N, 115°30.5'W; sounding, 2,000 fm; wind, 320°, force 3; weather, overcast; sea, very rough; wire angle, 48°

0	15.51	5.64	0.42	0	15.51	5.64	0.42
7	15.32	5.61	0.49	10	15.30	5.60	0.52
18	14.62	5.58	0.73	20	14.50	5.56	0.90
34	13.29	5.02	1.01	30	13.70	5.15	1.00
51	12.99	4.82	1.03	50	13.00	4.84	1.03
67	12.83	4.62	1.11	75	12.45	4.45	1.18
98	10.42	3.68	1.48	100	10.35	3.55	1.53
123	9.98	2.34	1.88	150	9.68	2.02	2.13
166	9.52	1.84	2.26	200	9.28	1.25	2.46
212	9.22	0.97	2.52	250	9.04	0.55	2.70
254	9.03	0.53	2.72	300	8.37	0.50	2.82
299	8.42	0.51	-	400	7.13	0.36	2.92
387	7.21	0.39	2.90	500	6.53	0.25	3.05
478	6.66	0.24	3.05	600	5.86	0.25	3.04
616	5.75	0.25	3.04				

123.60 PAOLINA-T; June 19, 1950; 1755 GCT; 26°38.5'N, 116°09'W; sounding, 2,100 fm; wind, 320°, force 4; weather, overcast; sea, very rough; wire angle, 16°.

0	17.67	5.20	0.35	0	17.67	5.20	0.35
10	17.66	5.35	0.36	10	17.66	5.35	0.36
24	17.66	5.19	0.32	20	17.66	5.21	0.32
48	17.63	5.55	0.35	30	17.65	5.21	0.32
72	15.70	5.37	0.38	50	17.61	5.55	0.35
96	13.74	5.26	0.51	75	15.45	5.36	0.39
148	10.48	4.16	1.31	100	13.00	5.24	0.54
195	11.12	1.31	2.29	150	10.50	4.00	1.50
287	9.56	0.82	2.60	200	11.12	1.26	2.31
383	8.26	0.64	2.77	250	10.27	0.95	2.51
474	7.26	0.56r	2.98	300	9.35	0.80	2.63
570	6.50	0.23	3.04	400	8.06	0.60	2.80
763	5.16	0.27	3.13	500	7.04	0.36	3.00
955	4.32	0.53	3.12	600	6.29	0.24	3.07
1157	3.66	0.70	3.14	700	5.59	0.26	3.12
				800	4.97	0.30	3.13
				1000	4.16	0.58	3.11

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

PAOLINA-T; June 18, 1950; 2030 GCT; 26°43.5'N, 114°29.5'W; sounding, 1,650 fm; wind, 290°, force 5; weather, partly cloudy; sea, very rough; wire angle, 37°. 127.40

0	15.51		5.74	0.34	0	15.51	5.74	0.34
8	15.48		5.77	0.33	10	15.48	5.76	0.33
20	15.32		5.66	0.33	20	15.32	5.66	0.33
41	13.88		5.33	0.45	30	15.26	5.52	0.36
61	11.97		4.63	1.08	50	12.80	5.05	0.62
81	10.73		3.28	1.61	75	10.99	3.77	1.51
125	10.06		2.12	2.14	100	10.28	2.73	1.88
166	10.44		0.96	2.46	150	10.35	1.25	2.36
246	9.65		0.47	2.68	200	10.18	0.70	2.58
332	8.84		0.32	2.79	250	9.60	0.46	2.69
413	8.10		0.26	2.94	300	9.12	0.35	2.76
500	7.36		0.28	3.09	400	8.20	0.26	2.92
677	5.74		0.36	3.12	500	7.36	0.28	3.09
860	4.90		0.49	3.11	600	7.36	0.35	3.12
1059	4.14		0.57	3.10	700	5.60	0.35	3.12
					800	5.12	0.45	3.12
					1000	4.35	0.55	3.11

PAOLINA-T; June 14, 1950; 1853 GCT; 26°22'N, 113°54'W; sounding, 110 fm; wind, 340°, force 5; weather, clear; sea, very rough; wire angle, 10°. 130.35

0	13.95	33.75	5.75	0.82	0	13.95	33.75	5.75	0.82	25.25	272.7	0.000
10	13.75	33.77	5.70	0.85	10	13.75	33.77	5.70	0.85	25.31	267.6	0.027
25	11.98	33.71	3.40	1.41	20	13.45	33.72	4.50	1.14	25.33	265.6	0.054
49	11.61	34.05	1.82	2.08	30	11.79	33.71	3.10	1.56	25.65	235.8	0.079
73	11.38	34.36	0.56	2.55	50	11.60	34.05	1.82	2.11	25.94	208.0	0.123
98	11.36	34.43	0.44	2.54	75	11.38	34.36	0.54	2.55	26.23	181.7	0.172
147	11.12	34.56	0.36	2.18r	100	11.37	34.44	0.43	(2.54)	26.29	176.3	0.217
					150	(11.11)	(34.57)	(0.36)		(26.44)	(163.5)	(0.301)

PAOLINA-T; June 14, 1950; 2226 GCT; 26°09'N, 114°07.5'W; sounding, 1,100 fm; wind, 340°, force 6; weather, clear; sea, very rough; wire angle, 13°. 130.40

0	17.16		5.21	0.53	0	17.16	5.21	0.53
10	17.17		5.67	0.55	10	17.17	5.67	0.55
24	16.63		5.65	0.61	20	16.70	5.67	0.59
53	12.26		4.37	1.32	30	16.50	5.60	0.69
78	11.24		2.92	2.07	50	14.65	4.55	1.20
107	11.62		1.28	2.40	75	11.25	3.05	2.00
161	11.02		0.74	2.54	100	11.60	1.48	2.36
214	10.58		0.27	2.58	150	11.19	0.82	2.53
321	9.51		0.29	2.73	200	10.69	0.30	2.57
433	7.83		0.19	2.83	250	10.30	0.28	2.61
541	6.96		0.22	3.02	300	9.79	0.28	2.69
649	6.20		0.27	3.09	400	8.30	0.22	2.80
861	5.06		0.33	3.18	500	7.25	0.20	2.93
1075	4.18		0.68	3.14	600	6.56	0.25	3.06
1270	3.56		0.48	3.04	700	5.87	0.30	3.11
					800	5.35	0.32	3.16
					1000	4.48	0.52	3.16

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

40.45 BLACK DOUGLAS; July 23, 1950; 0200 GCT; 41°33'N, 125°00'W; sounding, 710 fm; wind, 340°, force 4; weather, overcast; sea, very rough; wire angle, 2°.

0	11.19	33.19E	6.15	1.17a)	0	11.19	33.19	6.15	1.17	25.35	263.4	0.000
10	11.15	33.19	5.84	1.22	10	11.15	33.19	5.84	1.22	25.35	262.7	0.026
25	9.32	33.57	5.50	2.00	20	9.40	33.41	5.60	1.89	25.83	218.4	0.050
50	8.52	33.77	5.60r	2.33	30	9.25	33.63	5.36	2.08	26.03	200.0	0.071
74	7.91	33.87	3.23	2.46	50	8.52	33.77	4.65	2.32	26.25	179.0	0.109
98	7.78	33.91	3.15	2.55	75	7.90	33.87	3.23	2.46	26.42	162.8	0.152
152	7.02	34.02	1.97	2.59	100	7.75	33.91	3.14	2.56	26.48	158.2	0.192
200	6.66	34.07	1.89	2.73	150	7.05	34.02	1.99	2.59	26.66	141.2	0.266
296	5.89	34.11	1.25	2.90	200	6.66	34.07	1.89	2.73	26.76	132.9	0.335
397	5.34	34.20	0.83	3.19	250	6.28	34.09	1.65	2.82	26.82	127.2	0.400
494	5.14	34.20	0.65	3.19	300	5.87	34.11	1.24	2.91	26.89	121.2	0.462
596	4.90	34.27	0.41	3.32	400	5.35	34.20	0.84	3.20	27.02	109.5	0.578
693	4.53	34.38	0.52	3.37	500	5.14	34.20	0.65	3.20	27.05	108.0	0.686
796	4.24	34.43	0.57	3.38	600	4.90	34.27	0.41	3.32	27.13	101.1	0.791
994	3.84	34.45	0.49	3.60	700	4.50	34.38	0.54	3.37	27.26	88.9	0.886
					800	4.24	34.43	0.57	3.38	27.33	83.3	0.973
					1000	(3.85)	(34.45)	(0.50)	(3.60)	(27.39)	(79.1)	(1.135)

40.50 BLACK DOUGLAS; July 22, 1950; 2142 GCT; 41°23'N, 125°23'W; sounding, 1,690 fm; wind, 350°, force 3; weather, overcast; sea, rough; wire angle, 0°.

0	10.33	33.17E	6.14	1.65	0	10.33	33.17	6.14	1.65	25.49	250.6	0.000
10	10.20	33.17	5.98	1.70	10	10.20	33.17	5.98	1.70	25.51	248.5	0.025
25	8.78	33.39	5.87	2.00	20	8.97	33.21	5.91	1.86	25.74	226.5	0.049
50	8.45	33.69	4.68	2.35	30	8.66	33.44	5.83	2.07	25.97	205.9	0.070
74	8.32	33.82	4.35	2.55	50	8.45	33.69	4.68	2.35	26.20	183.9	0.109
99	7.28	33.77	3.31	2.38	75	8.28	33.82	4.34	2.55	26.33	172.1	0.154
153	7.14	34.04	1.97	2.67	100	7.28	33.77	3.25	2.60	26.43	162.2	0.196
201	6.58	34.07	1.90	2.72	150	7.16	34.03	2.00	2.66	26.66	141.8	0.271
297	6.06	34.14	1.13	3.07	200	6.63	34.07	1.90	2.72	26.76	132.7	0.340
399	5.38	34.13	0.88	3.06	250	6.29	34.12	1.55	2.89	26.84	125.2	0.404
496	5.12	34.23	0.53	3.25	300	6.04	34.14	1.13	3.07	26.89	121.2	0.466
597	4.78	34.31	0.41	3.31	400	5.40	34.13	0.87	3.06	26.96	115.3	0.584
796	4.23	34.38	0.37	3.36	500	5.12	34.23	0.52	3.26	27.07	105.6	0.695
990	3.74	34.45	0.61	3.40	600	4.77	34.31	0.41	3.31	27.18	96.6	0.796
1193	3.12	34.51	0.62	3.28	700	4.48	34.35	0.38	3.33	27.24	90.9	0.890
					800	4.20	34.38	0.38	3.36	27.30	86.3	0.979
					1000	3.72	34.45	0.60	3.40	27.40	77.6	1.143

40.60 BLACK DOUGLAS; July 22, 1950; 1428, 1509 GCT; 41°03'N, 126°09'W; sounding, 1,680 fm; wind, 360°, force 3; weather, overcast; sea, rough; wire angle, 11°, 19°.

0	12.87	33.06E	5.42	1.20a)	0	12.87	33.06	5.42	1.20	24.94	304.7	0.000
10	12.73	33.06	5.67	1.30	10	12.73	33.06	5.67	1.30	24.97	300.1	0.030
25	10.99	33.19	5.20	1.92	20	12.30	33.11	5.45	1.78	25.09	289.0	0.060
54	8.92	33.51	4.55	2.44	30	10.40	33.28	5.08	2.03	25.56	244.0	0.086
78	8.19	33.66	3.78	2.72	50	9.05	33.47	4.62	2.38	25.93	209.1	0.132
107	7.83	33.87	3.12	3.24r	75	8.27	33.65	3.87	2.68	26.19	184.7	0.181
160	7.37	33.98	2.16	3.12	100	7.90	33.83	3.26	2.85	26.39	166.2	0.225
211	6.62	34.04	2.14	3.28	150	7.46	33.97	2.21	3.08	26.57	150.4	0.304
315	5.96	34.11	0.83	3.40	200	6.75	34.03	2.15	3.25	26.71	137.2	0.376
423	5.38	34.16	0.83	3.28	250	6.33	34.07	1.95	3.35	26.80	129.6	0.442
527	4.80	34.23	0.48	3.49	300	6.05	34.10	0.90	3.40	26.86	124.3	0.506
633	4.45	34.29	0.44	3.45	400	5.50	34.15	0.83	3.32	26.97	115.0	0.626
					500	4.96	34.21	0.58	3.40	27.08	105.1	0.736
814	3.94	34.42	0.32	3.46	600	4.55	34.27	0.45	3.45	27.17	96.9	0.837
1025	3.52	34.51	0.46	3.45	700	4.26	34.34	0.37	3.46	27.26	89.2	0.930
1228	3.04	34.52	0.52	3.60	800	3.99	34.41	0.32	3.46	27.34	81.8	1.015
					1000	3.55	34.50	0.45	3.44	27.46	71.9	1.169

a) Many double values; the smoothest property distribution was obtained from the values listed.

E Evaporation of salinity samples occurred on all Black Douglas stations of Cruise 5007. Individual salinity values must be considered doubtful (see introduction). They appear to be 0.02‰ higher on an average.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	40.70
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

BLACK DOUGLAS; July 22, 1950; 0424 GCT; 40°42'N, 126°55'W; sounding, 1,680 fm; wind, 360°, force 2; weather, overcast; sea, very rough; wire angle, 19°.

0	13.65	32.94E	6.22	0.91	0	13.65	32.94	6.22	0.91	24.69	326.4	0.000
10	13.63	32.94	5.86	0.98	10	13.63	32.94	5.86	0.98	24.69	326.5	0.033
24	10.90	33.28	5.76	1.48	20	10.93	33.17	5.80	1.40	25.38	260.8	0.062
46	10.16	33.33	5.52	1.66	30	10.88	33.30	5.70	1.54	25.49	250.5	0.088
67	8.45	33.46	5.56r	1.95	50	9.10	33.35	5.44	1.69	25.83	218.6	0.134
86	8.29	33.57	4.19	2.19	75	8.37	33.51	4.60	2.08	26.07	196.5	0.186
128	7.91	33.82	4.27r	2.44	100	8.15	33.63	3.80	2.29	26.20	184.7	0.234
167	7.62	33.98	2.61	2.53	150	7.75	33.93	2.83	2.50	26.49	157.6	0.319
243	6.80	34.02	2.11	2.61	200	7.26	34.01	2.36	2.56	26.63	145.4	0.396
324	6.16	34.07	1.58	2.98	250	6.74	34.03	2.06	2.63	26.71	137.8	0.466
401	5.62	34.11	0.97	3.15	300	6.34	34.05	1.75	2.85	26.78	131.8	0.534
482	5.03	34.18	0.63	3.18	400	5.63	34.11	0.99	3.15	26.92	119.5	0.660
640	4.47	34.29	0.41	3.24	500	4.96	34.19	0.60	3.18	27.06	106.6	0.773
798	4.02	34.36	0.32	3.31	600	4.60	34.27	0.45	3.22	27.16	97.5	0.875
973	3.52	34.43	0.59	3.41	700	4.30	34.32	0.35	3.27	27.24	91.2	0.969
					800	4.00	34.36	0.38	3.31	27.30	85.6	1.057
					1000	(3.45)	(34.44)	(0.64)	(3.41)	(27.42)	(75.0)	(1.218)

BLACK DOUGLAS; July 21, 1950; 2205 GCT; 40°23'N, 127°40'W; sounding, 760 fm; wind, 340°, force 4; weather, overcast; sea, rough; wire angle, 10°. 40.80

0	15.63	32.34E	4.89	0.60	0	15.63	32.34	4.89	0.60	23.81	410.3	0.000
10	15.65	32.32	4.96	0.56	10	15.65	32.32	4.96	0.56	23.79	412.2	0.041
25	15.12	32.54	4.98	0.69	20	15.47	32.40	4.99	0.62	23.89	402.9	0.082
49	12.96	32.68	5.54	0.93	30	14.85	32.58	5.01	0.73	24.16	377.3	0.121
74	10.60	32.75	5.32	1.14	50	12.85	32.68	5.54	0.94	24.65	331.2	0.192
98	9.34	32.84	5.15	1.38	75	10.50	32.75	5.31	1.14	25.13	285.8	0.269
151	8.43	33.30	4.05	1.94	100	9.28	32.84	5.14	1.42	25.41	260.1	0.337
199	7.94	33.80	3.02	2.43	150	8.45	33.29	4.12	1.92	25.89	215.2	0.455
291	6.97	34.05	1.95	2.74a)	200	7.93	33.80	3.00	2.31	26.36	170.6	0.553
388	7.98r	34.11	1.43	3.02	250	7.40	33.99	2.39	2.58	26.59	149.6	0.632
480	5.55	34.13	1.00	3.20	300	6.89	34.06	1.89	2.78	26.72	138.2	0.704
576	5.18	34.20	0.72	3.34	400	6.03	34.11	1.37	3.04	26.87	124.6	0.835
765	4.11	34.38	0.37	3.53	500	5.49	34.14	0.94	3.22	26.96	116.8	0.956
949	3.82	34.42	0.27	3.47	600	5.08	34.22	0.67	3.37	27.07	107.0	1.068
1141	3.01	34.54	0.71	3.31	700	4.47	34.32	0.49	3.48	27.22	93.1	1.168
					800	4.05	34.40	0.33	3.52	27.33	83.2	1.256
					1000	3.65	34.44	0.34	3.43	27.40	77.4	1.417

BLACK DOUGLAS; July 21, 1950; 1441 GCT; 40°02'N, 128°25'W; sounding, 2,480 fm; wind, 360°, force 4; weather, overcast; sea, very rough; wire angle, 18°. 40.90

0	15.62	32.79E	5.23	0.70	0	15.62	32.79	5.23	0.70	24.16	377.3	0.000
10	15.66	32.79	5.14	0.74	10	15.66	32.79	5.14	0.74	24.15	378.4	0.038
24	15.64	32.79	5.33	0.74	20	15.65	32.79	5.32	0.74	24.15	378.5	0.076
52	15.25	32.75	5.30	0.79	30	15.31	32.79	5.34	0.74	24.22	371.7	0.113
76	10.83	32.75	5.28	1.10	50	15.25	32.75	5.33	0.78	24.21	373.9	0.188
104	8.96	32.79	5.44	1.39	75	11.05	32.75	5.28	1.07	25.04	294.9	0.271
155	8.20	33.49	3.78	2.15	100	9.08	32.77	5.43	1.35	25.38	262.2	0.341
204	7.51	33.93	2.64	2.47	150	8.26	33.41	4.12	2.08	26.01	203.4	0.457
302	6.53	34.02	1.98	2.61	200	7.56	33.92	2.71	2.44	26.51	156.2	0.547
404	5.61	34.09	1.33	2.80	250	7.02	33.99	2.25	2.54	26.64	144.6	0.622
501	5.20	34.13	0.88	3.05	300	6.54	34.02	1.99	2.60	26.73	136.5	0.693
599	4.62	34.20	0.46	3.17	400	5.65	34.09	1.37	2.79	26.90	121.4	0.821
794	3.97	34.38	0.32	3.24	500	5.21	34.13	0.89	3.05	26.98	114.1	0.940
999	3.32	34.47	0.46	3.32	600	4.60	34.20	0.46	3.17	27.11	102.7	1.048
1202	2.96	34.52	0.68	3.15	700	4.25	34.30	0.36	3.21	27.23	92.1	1.144
					800	3.95	34.39	0.33	3.24	27.33	82.9	1.233
					1000	3.32	34.47	0.47	3.32	27.45	71.4	1.387

a) Mean value of 2.67 and 2.81 μg at/L.
E Evaporation (see page 204).

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

40.100 BLACK DOUGLAS; July 21, 1950; 0650 GCT; 39°42'N, 129°10'W; sounding, 2,500 fm; wind, 350°, force 3; weather, overcast; sea, rough; wire angle, 19°.

0	15.55	32.50E	4.79	0.62	0	15.55	32.50	4.79	0.62	23.95	396.6	0.000
10	15.56	32.47	5.26	0.62	10	15.56	32.47	5.26	0.62	23.93	399.6	0.040
24	15.54	32.47	2.72r	0.63	20	15.55	32.47	5.25	0.63	23.93	399.9	0.080
52	-	32.75	5.12	0.25r	30	15.00	32.51	5.24	0.65	24.08	385.5	0.119
75	9.68	32.56	5.03	1.11	50	11.00	32.75	5.13	0.85	25.05	293.6	0.187
102	8.48	32.72	4.81	1.30	75	9.68	32.56	5.03	1.11	25.12	286.6	0.259
150	7.86	33.37	0.69r	1.88	100	8.51	32.72	4.83	1.29	25.43	257.6	0.328
196	7.79	33.77	2.65	2.30	150	7.86	33.37	3.93	1.88	26.04	200.8	0.442
290	6.78	34.07	1.70	2.61	200	7.78	33.80	2.54	2.31	26.39	168.4	0.535
387	5.86	34.09	1.69	2.96	250	7.35	34.01	1.80	2.50	26.61	147.4	0.613
481	5.25	34.16	1.72	3.14	300	6.66	34.07	1.70	2.64	26.75	134.5	0.684
575	4.83	34.27	0.41	3.30	400	5.75	34.09	1.70	2.99	26.89	122.6	0.812
762	4.23	34.38	0.35	3.25	500	5.17	34.18	1.67	3.18	27.03	109.8	0.928
955	3.68	34.47	0.42	3.35	600	4.75	34.29	0.37	3.30	27.16	97.7	1.033
1149	3.22	34.52	0.46	3.17	700	4.41	34.35	0.35	3.27	27.25	90.2	1.126
					800	4.11	34.40	0.36	3.26	27.32	83.9	1.213
					1000	3.55	34.49	0.44	3.33	27.45	72.5	1.369

40.110 BLACK DOUGLAS; July 20, 1950; 2312 GCT; 39°23'N, 129°55'W; sounding, 2,460 fm; wind, 360°, force 3; weather, overcast; sea, moderate; wire angle, 13°.

0	16.14	32.70E	5.71	0.77	0	16.14	32.70	5.71	0.77	23.97	395.1	0.000
10	16.15	32.74	5.77	0.75	10	16.15	32.74	5.77	0.75	24.00	392.7	0.039
24	15.64	32.70	5.54u	0.75	20	15.92	32.71	5.83	0.75	24.03	390.2	0.078
48	11.92	32.72	5.89	0.87	30	13.65	32.70	5.87	0.78	24.50	344.8	0.115
73	10.11	32.66	5.90	1.09	50	11.80	32.72	5.90	0.89	24.88	309.6	0.181
97	8.87	32.66	5.44	1.27	75	9.95	32.66	5.90	1.11	25.15	283.7	0.255
149	7.65	33.19	4.73	1.84	100	8.74	32.66	5.35	1.30	25.35	265.4	0.324
195	7.32	33.64	4.43	1.90	150	7.64	33.19	4.72	1.84	25.93	211.2	0.442
286	6.68	33.98	2.52	2.46	200	7.29	33.66	4.41	1.92	26.35	171.9	0.539
382	5.84	34.02	1.55	2.85	250	6.98	33.79	3.71	2.23	26.49	159.0	0.621
474	5.32	34.09	1.58	3.09	300	6.59	33.98	2.17	2.54	26.69	140.2	0.696
571	4.67	34.16	0.58	3.18	400	5.74	34.03	1.55	2.91	26.84	127.0	0.829
762	4.15	34.29	0.46	3.32	500	5.16	34.11	1.44	3.13	26.98	115.0	0.950
955	3.57	34.38	0.35	3.31a)	600	4.54	34.18	0.51	3.25	27.10	103.5	1.060
1157	3.16	34.49	0.61	3.20	700	4.30	34.25	0.43	3.33	27.18	96.4	1.159
					800	4.04	34.31	0.37	3.36	27.26	89.8	1.252
					1000	3.45	34.40	0.32	3.35	27.39	78.0	1.421

43.50 BLACK DOUGLAS; July 23, 1950; 0908 GCT; 40°48'N, 124°57'W; sounding, 1,560 fm; wind, 360°, force 3; weather, light drizzle; sea, rough; wire angle, 0°.

0	11.97	33.13E	6.38	1.12b)	0	11.97	33.13	6.38	1.12	25.17	281.1	0.000
10	11.55	33.08	6.09	1.16	10	11.55	33.08	6.09	1.16	25.20	277.8	0.028
25	8.28	32.90	5.58	1.61	20	8.28	32.91	5.75	1.50	25.62	238.5	0.054
50	9.30	33.64	5.42	1.88	30	9.48	32.91	5.53	1.65	25.43	256.7	0.078
75	8.80	33.80	4.64	2.14	50	9.30	33.64	5.42	1.88	26.03	200.3	0.124
99	8.42	33.87	3.86	2.52	75	8.80	33.80	4.64	2.14	26.23	181.3	0.172
153	7.43	34.02	2.67	2.63	100	8.41	33.87	3.82	2.52	26.35	170.6	0.216
201	7.02	34.07	2.27	2.77	150	7.49	34.02	2.70	2.62	26.60	147.1	0.295
295	6.10	34.02	1.50	3.04	200	7.03	34.02	2.28	2.76	26.66	141.7	0.368
395	5.34	34.13	1.11	3.36	250	6.60	34.02	1.85	2.90	26.72	136.7	0.437
490	5.42	34.25	0.54	3.44	300	6.03	34.02	1.49	3.06	26.80	130.1	0.504
591	4.87	34.33	0.44	3.54	400	5.35	34.14	1.09	3.36	26.98	113.9	0.626
788	4.22	34.45	0.60	3.45	500	5.40	34.26	0.51	3.44	27.06	106.9	0.736
984	3.88	34.43	0.63	3.41	600	4.84	34.34	0.45	3.54	27.19	95.2	0.837
1187	3.46	34.47	0.58	3.29	700	4.46	34.42	0.50	3.50	27.30	85.4	0.927
					800	4.20	34.45	0.60	3.45	27.35	81.4	1.011
					1000	3.85	34.43	0.62	3.40	27.37	80.6	1.174

a) Mean value of 3.25 and 3.37 μg at/L.
b) Many double values; the smoothest property distribution was obtained from the values listed.
E Evaporation (see page 204).

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
BLACK DOUGLAS; July 23, 1950; 1452 GCT; 40°28'N, 125°43'W; sounding, 1,580 fm; wind, 340°, force 5; weather, overcast; sea, very rough; wire angle, 28°.													43.60
0	13.44	32.92E	5.50	0.95a)	0	13.44	32.92	5.50	0.95	24.71	324.2	0.000	
9	13.16	32.88	5.45	0.87	10	13.16	32.88	5.45	0.87	24.74	321.7	0.032	
22	13.25	32.84	5.60	0.94	20	13.25	32.84	5.60	0.92	24.69	326.7	0.065	
44	11.84	33.08	5.03	1.23	30	13.25	32.84	5.34	1.03	24.69	326.9	0.097	
65	9.29	33.39	4.62	1.39	50	10.45	33.17	4.91	1.24	25.47	253.4	0.155	
86	8.43	33.51	4.25	1.85	75	8.79	33.48	4.45	1.55	25.98	204.7	0.213	
130	7.46	33.55	3.54	2.29	100	8.03	33.52	4.00	2.00	26.13	191.3	0.262	
170	7.26	-	2.84	2.40	150	7.36	33.57	3.21	2.35	26.27	178.8	0.355	
249	6.55	33.87	2.06	2.82	200	6.97	33.69	2.50	2.50	26.41	165.5	0.440	
332	6.02	34.05	1.26	3.04	250	6.54	33.87	2.06	2.82	26.61	147.1	0.519	
413	5.57	34.09	0.85	3.22	300	6.22	34.01	1.58	2.96	26.77	133.2	0.589	
498	5.12	34.18	0.60	3.31	400	5.65	34.08	0.90	3.19	26.89	122.1	0.716	
663	4.43	34.29	0.46	3.32	500	5.15	34.18	0.60	3.31	27.03	109.7	0.832	
831	3.86	34.36	0.36	3.40	600	4.66	34.26	0.49	3.32	27.15	98.9	0.936	
1016	3.38	34.43	0.56	3.31	700	4.29	34.30	0.44	3.33	27.22	92.6	1.032	
					800	3.96	34.34	0.37	3.40	27.29	86.6	1.122	
					1000	3.41	34.42	0.54	3.32	27.41	76.1	1.285	
BLACK DOUGLAS; July 24, 1950; 0016 GCT; 40°04'N, 124°55'W; sounding, 680 fm; wind, 340°, force 4; weather, haze; sea, very rough; wire angle, 13°.													47.55
0	9.67	33.10E	4.91	1.58a)	0	9.67	33.10	4.91	1.58	25.55	245.0	0.000	
10	9.66	33.10	4.64	1.53	10	9.66	33.10	4.64	1.53	25.55	245.1	0.024	
25	9.58	33.15	5.32	1.54	20	9.61	33.13	5.20	1.53	25.58	242.4	0.049	
49	9.82	33.24	5.25	1.56	30	9.60	33.16	5.34	1.54	25.60	240.2	0.073	
73	8.86	33.64	4.11	2.06	50	9.82	33.24	5.22	1.56	25.63	238.0	0.121	
97	8.27	33.11	3.40	2.32	75	8.80	33.65	4.04	2.09	26.11	192.4	0.175	
151	7.55	33.96	3.17	2.64	100	8.24	33.78	3.39	2.33	26.30	174.9	0.220	
199	7.04	34.02	1.19r	2.89	150	7.58	33.96	3.19	2.62	26.54	152.8	0.302	
295	6.12	34.04	1.48	3.07	200	7.03	34.02	2.60	2.89	26.67	141.7	0.376	
396	5.22	34.07	1.07	3.21	250	6.55	34.03	1.94	3.01	26.74	135.3	0.445	
492	4.89	34.13	0.82	3.34	300	6.09	34.04	1.46	3.08	26.81	129.2	0.512	
594	4.54	34.16	0.47	3.45	400	5.20	34.07	1.06	3.22	26.94	117.3	0.635	
691	4.37	34.29	0.48	-	500	4.87	34.13	0.80	3.35	27.02	110.0	0.748	
792	4.06	34.34	0.65	3.63	600	4.55	34.16	0.47	3.45	27.08	105.1	0.856	
987	3.62	34.43	0.48	3.68	700	4.35	34.30	0.49	3.54	27.22	93.3	0.955	
					800	4.05	34.34	0.65	3.63	27.28	87.7	1.046	
					1000	(3.60)	(34.43)	(0.49)	(3.68)	(27.40)	(77.6)	(1.211)	
BLACK DOUGLAS; July 23, 1950; 2032 GCT; 39°54'N, 125°18'W; sounding, 1,460 fm; wind, 350°, force 5; weather, drizzle; sea, high; wire angle, 14°.													47.60
0	12.86	32.77E	6.15	1.01	0	12.86	32.77	6.15	1.01	24.72	324.0	0.000	
10	12.86	32.77	5.87	1.00	10	12.86	32.77	5.87	1.00	24.72	323.9	0.032	
24	12.83	32.74	5.51	1.05	20	12.84	32.76	5.55	1.03	24.71	324.8	0.065	
48	10.24	32.66	5.76	1.62	30	12.83	32.70	5.54	1.10	24.67	329.3	0.098	
71	8.79	32.68	5.73	1.98	50	10.00	32.66	5.76	1.67	25.15	283.8	0.159	
95	8.00	32.94	4.90	2.08	75	8.64	32.70	5.70	2.01	25.40	260.5	0.227	
147	7.66	33.69	3.04	2.29	100	7.94	33.03	4.65	2.09	25.76	226.4	0.288	
193	7.34	33.89	2.76	2.41	150	7.64	33.71	3.02	2.30	26.33	172.4	0.388	
287	6.46	34.00	1.93	2.58	200	7.29	33.90	2.73	2.42	26.54	154.0	0.469	
385	5.80	34.05	1.14	3.05	250	6.80	33.97	2.29	2.50	26.66	143.1	0.544	
479	5.20	34.14	0.70	3.23	300	6.37	34.00	1.80	2.61	26.74	135.8	0.613	
578	4.82	34.20	0.51	3.29	400	5.70	34.06	1.06	3.09	26.87	124.3	0.743	
773	4.16	34.34	0.34	-	500	5.13	34.15	0.65	3.24	27.01	111.7	0.861	
968	3.62	34.40	0.41	3.39	600	4.75	34.21	0.49	(3.30)	27.10	103.8	0.969	
1171	3.20	34.47	0.60	3.33	700	4.40	34.29	0.40	(3.34)	27.20	94.6	1.068	
					800	4.06	34.35	0.35	(3.37)	27.29	87.0	1.159	
					1000	3.55	34.41	0.41	3.38	27.39	78.5	1.324	

a) Many double values; the smoothest property distribution was obtained from the values listed.
E Evaporation (see page 204).

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

50.55 BLACK DOUGLAS; July 17, 1950; 2258 GCT; 39°30'N, 124°30'W; sounding, 1,120 fm; wind, 320°, force 2; weather, overcast; sea, rough; wire angle, 10°.

0	10.48	32.72E	5.51	1.09	0	10.48	32.72	5.51	1.09	25.11	286.2	0.000
10	9.83	32.66	4.92	1.09	10	9.83	32.66	4.92	1.09	25.24	274.3	0.028
25	9.69	32.86	5.51	-	20	9.45	32.77	5.46	1.13	25.33	266.4	0.055
49	8.00	32.77	5.09	1.46	30	9.80	32.84	5.50	1.19	25.32	267.0	0.082
73	7.75	33.08	4.36	1.74	50	8.00	32.77	5.08	1.49	25.55	245.8	0.133
98	8.04	33.44	3.85	1.93	75	7.75	33.11	4.32	1.76	25.85	217.3	0.191
201p	7.01	33.87	2.67	2.36	100	8.04	33.45	3.82	1.94	26.07	196.7	0.243
286p	6.29	34.00	1.59	2.66	150	7.55	33.74	3.17	2.17	26.37	168.9	0.334
389p	5.63	34.09	0.98	2.92	200	7.03	33.87	2.68	2.36	26.55	152.8	0.415
498p	4.76	34.09	0.84	3.14	250	6.59	33.95	2.06	2.55	26.67	141.6	0.488
695p	4.34	34.27	0.35	3.19	300	6.19	34.02	1.48	2.70	26.78	132.0	0.556
917p	3.76	34.40	0.50	3.05	400	5.51	34.09	0.95	2.94	26.92	119.6	0.682
1122p	3.29	34.42	0.61	3.23	500	4.75	34.09	0.85	3.14	27.00	111.6	0.797
					600	4.52	34.18	0.57	3.19	27.10	103.3	0.906
					700	4.33	34.28	0.35	3.19	27.20	94.5	1.004
					800	4.05	34.35	0.38	3.12	26.29	86.9	1.095
					1000	3.55	34.41	0.52	3.10	27.38	78.5	1.260

50.60 BLACK DOUGLAS; July 18, 1950; 0504 GCT; 39°20'N, 124°52'W; sounding, 1,615 fm; wind, 290°, force 5; weather, cloudy; sea, high; wire angle, 9°.

0	13.03	32.75E	6.15	0.80	0	13.03	32.75	6.15	0.80	24.67	328.7	0.000
10	13.19	32.74	-	0.77	10	13.19	32.74	6.09	0.77	24.63	332.8	0.033
25	13.15	32.74	5.99	0.75	20	13.18	32.74	6.01	0.76	24.63	332.6	0.066
49	13.06	32.75	-	0.84	30	13.15	32.74	6.00	0.76	24.64	332.4	0.100
74	10.98	32.74	6.19	1.09	50	13.05	32.75	6.08	0.84	24.66	330.3	0.166
98	10.47	33.21	5.76	1.35	75	10.97	32.74	6.19	1.10	25.04	294.7	0.244
151	7.76	33.42	-	2.19r	100	10.30	33.22	5.65	1.36	25.53	248.2	0.312
198	7.96	33.87	2.71	1.89	150	7.76	33.41	3.99	1.65	26.08	196.3	0.423
291	7.15	34.00	-	2.31	200	7.94	33.88	(2.67)	1.90	26.43	164.7	0.513
388	6.16	34.07	0.45	2.73	250	7.56	33.97	(1.70)	2.11	26.55	153.4	0.592
482	5.68	34.16	-	2.99	300	7.06	34.00	(0.94)	2.35	26.65	145.0	0.668
579	4.82	34.16	0.58	3.09	400	6.05	34.09	0.45	2.78	26.85	126.3	0.802
772	4.21	34.27	0.31	3.17	500	5.55	34.16	0.50	3.02	26.97	116.1	0.924
966	3.72	34.38	-	3.14	600	4.72	34.16	0.58	3.10	27.06	107.1	1.036
1169	3.20	34.47	0.61	3.08	700	4.40	34.22	0.41	3.14	27.15	99.8	1.138
					800	4.15	34.29	0.31	3.16	27.23	92.5	1.236
					1000	3.64	34.40	0.44	3.14	27.37	80.4	1.408

50.70 BLACK DOUGLAS; July 18, 1950; 1204 GCT; 39°00'N, 125°36.5'W; sounding, 2,100 fm; wind, 320°, force 5; weather, fog; sea, very rough; wire angle, 7°.

0	13.90	32.75E	5.73	0.75	0	13.90	32.75	5.73	0.75	24.49	345.4	0.000
10	13.89	32.75	-	0.69	10	13.89	32.75	5.51	0.70	24.49	345.7	0.034
25	13.98	32.74	5.25	0.79	20	13.95	32.74	5.31	0.76	24.47	347.6	0.069
54	13.68	32.75	5.16	0.83	30	13.98	32.74	5.23	0.80	24.47	348.5	0.104
78	10.83	32.79	5.68	1.04	50	13.95	32.75	5.16	0.82	24.48	347.6	0.174
107	9.73	32.84	-	1.27	75	11.10	32.78	5.67	0.99	25.05	293.6	0.254
160	8.89	33.26	4.82	1.13r	100	9.89	32.82	5.55	1.22	25.29	271.1	0.324
213	8.36	33.77	-	2.15	150	9.01	33.13	4.98	1.69	25.67	235.4	0.451
318	7.38	34.07	1.73	2.54	200	8.50	33.65	(4.15)	2.07	26.16	190.1	0.558
428	6.58	34.11	-	2.77	250	8.01	33.96	(2.94)	2.32	26.48	160.7	0.645
533	5.78	34.16	0.46	2.92	300	7.54	34.06	(1.98)	2.49	26.62	147.5	0.722
639	5.40	34.25	-	3.05	400	6.81	34.10	0.99	2.72	26.76	135.8	0.863
846	4.41	34.33	-	3.18	500	5.97	34.14	0.52	2.88	26.90	122.8	0.993
1056	3.75	34.42	0.47	3.12	600	5.59	34.22		3.01	27.01	113.3	1.111
1260	3.19	34.47	-	3.18	700	5.05	34.28		3.10	27.12	103.1	1.219
					800	4.58	34.31		3.16	27.20	96.2	1.319
					1000	3.90	34.40		3.13	27.34	83.3	1.498

E Evaporation (see page 204).

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

BLACK DOUGLAS; July 18, 1950; 1915 GCT; 38°40'N, 126°21'W; sounding, 2,370 fm; wind, 320°, force 4; weather, distant fog; sea, very rough; wire angle, 18°. 50.80

0	12.49	32.74E	6.75	0.83	0	12.49	32.74	6.75	0.83	24.76	319.6	0.000
10	12.34	32.74	5.74	0.79	10	12.34	32.74	5.74	0.79	24.79	317.2	0.032
24	11.13	-	6.00	0.98	20	11.85	32.74	5.97	0.84	24.89	308.2	0.063
52	9.39	33.01	5.66	1.41	30	10.37	32.75	5.98	1.10	25.16	282.7	0.093
76	10.26	33.33	5.93	1.69	50	9.40	32.99	5.68	1.38	25.50	250.0	0.146
104	8.89	33.53	4.41	1.93	75	10.26	33.31	5.93	1.69	25.61	240.4	0.207
157	8.21	33.78	3.05	1.68r	100	9.09	33.50	4.66	1.90	25.95	208.2	0.263
208	7.72	33.98	2.21	2.35	150	8.27	33.75	3.22	2.13	26.27	178.4	0.360
306	6.70	34.04	1.50	2.61	200	7.80	33.96	2.35	2.32	26.51	156.8	0.443
407	5.73	-	1.12	2.83	250	7.31	34.02	1.84	2.47	26.63	146.1	0.520
504	5.32	34.11	0.76	2.98	300	6.77	34.04	1.53	2.60	26.72	138.2	0.590
602	4.82	34.18	0.52	3.20a)	400	5.78	34.06	1.15	2.82	26.86	125.1	0.722
792	4.24	34.29	0.34	3.25	500	5.36	34.10	0.78	2.99	26.94	118.2	0.844
983	3.68	34.40	0.56	3.19	600	4.84	34.18	0.53	3.20	27.07	107.1	0.956
1172	3.26	34.47	0.81	3.17	700	4.50	34.24	0.40	3.24	27.15	99.5	1.060
					800	4.22	34.30	0.35	3.24	27.23	92.7	1.156
					1000	3.65	34.41	0.58	3.18	27.37	79.6	1.328

BLACK DOUGLAS; July 19, 1950; 0124 GCT; 38°20'N, 127°05'W; sounding, 2,460 fm; wind, 320°, force 3; weather, distant fog; sea, very rough; wire angle, 13°. 50.90

0	15.76	32.94E	5.07	0.62	0	15.76	32.94	5.07	0.62	24.24	369.2	0.000
10	15.79	32.94	4.90	0.58	10	15.79	32.94	4.90	0.58	24.23	370.3	0.037
25	-	32.92	4.71	0.63	20	15.74	32.92	4.74	0.62	24.23	370.9	0.074
49	15.53	32.97	5.17	0.62	30	15.65	32.92	4.74	0.63	24.25	369.3	0.111
72	11.78	32.99	5.20	0.87	50	15.52	32.97	5.17	0.62	24.32	363.3	0.184
96	9.90	33.06	5.24	1.38	75	11.40	33.00	5.21	0.90	25.17	282.4	0.265
145	8.69	33.69	3.21	2.03	100	8.65	33.09	5.22	1.48	25.70	232.0	0.329
189	8.01	33.91	2.31	2.26	150	8.69	33.72	3.03	2.06	26.19	186.7	0.434
277	6.97	34.05	1.74	2.50	200	7.85	33.93	2.20	2.30	26.48	159.7	0.521
370	6.08	33.89r	1.22	2.75	250	7.25	34.02	1.87	2.44	26.63	145.3	0.596
459	5.37	34.16	0.76	2.98	300	6.74	34.07	1.61	2.56	26.74	135.6	0.667
553	4.99	34.38	0.52	3.12	400	5.81	34.13	1.05	2.84	26.91	120.4	0.795
738	4.46	34.36	0.35	3.10	500	5.19	34.23	0.64	3.07	27.07	106.5	0.909
924	3.88	34.43	0.72	3.12	600	4.85	34.37	0.47	3.12	27.22	93.0	1.008
1123	3.23	34.58	0.57	3.15	700	4.58	34.36	0.38	3.11	27.24	91.3	1.100
					800	4.29	34.37	0.43	3.10	27.28	88.2	1.190
					1000	3.64	34.49	0.70	3.14	27.44	73.7	1.352

BLACK DOUGLAS; July 19, 1950; 0818 GCT; 38°00'N, 127°49'W; sounding, 2,500 fm; wind, 310°, force 3; weather, drizzle; sea, very rough; wire angle, 0°. 50.100

0	15.70	32.84E	5.62	0.62	0	15.70	32.84	5.62	0.62	24.18	375.4	0.000
10	15.71	32.92	5.79	0.55	10	15.71	32.92	5.79	0.55	24.24	369.8	0.037
25	-	32.92	5.58	0.52	20	15.69	32.92	5.65	0.53	24.24	369.7	0.074
50	13.58	32.95	5.75	0.60	30	15.62	32.92	5.58	0.53	24.25	368.7	0.111
74	12.18	32.92	5.73	0.81	50	13.58	32.95	5.75	0.60	24.71	325.6	0.181
98	9.90	33.10	5.19	1.29	75	12.18	32.92	5.72	0.81	24.96	302.2	0.259
152	8.43	33.51	4.92	1.82	100	9.80	33.13	5.16	1.32	25.55	246.7	0.327
201	7.77	33.84	3.31	2.11	150	8.50	33.50	4.94	1.81	26.04	200.4	0.440
298	6.80	34.05	2.15	2.45	200	7.79	33.83	3.35	2.10	26.41	166.3	0.531
400	6.00	34.13	1.16	2.71	250	7.25	33.96	2.61	2.30	26.59	149.6	0.610
498	5.55	34.20	0.66	2.94	300	6.78	34.05	2.14	2.43	26.72	137.6	0.682
624p	4.87	34.29	0.39	3.04	400	6.00	34.13	1.16	2.71	26.89	122.8	0.812
784p	4.38	34.43	0.32	3.16	500	5.54	34.20	0.65	2.94	27.00	113.0	0.930
979p	3.84	34.42	0.48	3.14	600	5.00	34.26	0.45	3.07	27.11	103.0	1.038
					700	4.62	34.38	0.33	3.14	27.25	90.5	1.134
					800	4.35	34.43	0.34	3.16	27.32	84.6	1.222
					1000	(3.79)	(34.42)	(0.50)	(3.13)	(27.37)	(80.5)	(1.387)

a) Mean value of 3.10 and 3.31 μg at/L.
E Evaporation (see page 204).

SIO

CCOFI 5007

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
50.110	BLACK DOUGLAS; July 19, 1950; 1454 GCT; 37°40'N, 128°33'W; sounding, 2,600 fm; wind, 360°, force 2; weather, cloudy; sea, moderate; wire angle, missing.											
0	15.80	32.83E	4.83	0.55	0	15.80	32.83	4.83	0.55	24.14	378.9	0.000
10	15.84	32.86	4.64	0.56	10	15.84	32.86	4.64	0.56	24.16	377.3	0.038
25	15.81	32.84	4.93	0.56	20	15.83	32.84	4.80	0.56	24.15	378.6	0.076
50	13.96	32.95	5.03	0.60	30	15.75	32.84	5.00	0.57	24.17	377.3	0.113
75	12.64	32.88	4.76	0.62	50	13.96	32.95	5.03	0.60	24.64	332.9	0.184
100	10.73	32.99	5.01u	1.08	75	12.64	32.88	4.76	0.62	24.84	313.6	0.265
154	8.48	33.42	3.71	1.69	100	10.73	32.99	4.47	1.08	25.28	272.3	0.338
202	7.95	33.77	2.86	2.00	150	8.55	33.39	3.76	1.66	25.95	209.2	0.458
296	6.91	33.98	2.18	2.33	200	7.96	33.75	2.90	1.99	26.32	174.7	0.555
396	6.24	34.06	0.99	2.75	250	7.36	33.92	2.53	2.17	26.54	154.2	0.637
490	5.62	34.16	0.71	2.92	300	6.90	33.98	2.10	2.36	26.65	144.2	0.712
590	5.16	34.25	0.42	3.06	400	6.20	34.06	0.98	2.76	26.81	130.5	0.849
788	4.42	-	0.34	3.16a)	500	5.58	34.17	0.70	2.94	26.97	115.7	0.972
985	3.74	34.40	0.48	3.10	600	5.13	(34.26)	0.41	3.08	(27.10)	(104.7)	(1.082)
1189	3.20	34.43	0.66	2.98	700	4.75	(34.31)	0.35	3.14	(27.18)	(97.2)	(1.183)
					800	4.39	(34.35)	0.35	3.16	(27.25)	(90.9)	(1.277)
					1000	3.70	34.40	0.49	3.09	27.36	81.0	(1.450)
50.120	BLACK DOUGLAS; July 19, 1950; 2117 GCT; 37°20'N, 129°16.5'W; sounding, 2,600 fm; wind, 360°, force 2; weather, cloudy; sea, moderate; wire angle, 6°.											
0	17.03	-	5.56	0.60	0	17.03	(32.97)	5.56	0.60	(23.97)	(395.0)	(0.000)
10	16.74	32.97E	5.75	0.64	10	16.74	32.97	5.75	0.64	24.04	388.8	0.039
25	16.49	32.88	5.22u	0.68	20	16.51	32.93	5.85	0.67	24.06	387.0	0.078
50	13.04	32.81	6.02	0.70	30	16.47	32.84	5.95	0.68	24.00	393.0	0.117
74	11.15	32.84	5.64	0.99	50	13.04	32.81	6.02	0.70	24.71	325.7	0.189
99	9.73	33.12	5.43	1.48	75	10.60	32.84	5.63	1.00	25.19	280.8	0.265
152	8.08	33.49	4.20	1.96	100	9.57	33.13	5.42	1.48	25.59	243.1	0.330
200	7.62	33.82	3.24	2.14	150	8.11	33.47	4.25	1.96	26.08	197.0	0.440
295	6.66	33.96	2.58	2.21	200	7.62	33.82	3.24	2.14	26.42	164.8	0.540
396	5.60	33.98	1.54	3.00	250	7.15	33.93	2.85	2.18	26.58	150.6	0.609
491	5.19	34.11	0.79	3.15	300	6.60	33.96	2.54	2.22	26.68	141.8	0.683
592	4.74	34.13	0.51	3.18	400	5.58	33.98	1.53	3.02	26.82	128.6	0.817
790	4.15	34.33	0.35	3.18	500	5.15	34.11	0.75	3.16	26.98	114.9	0.940
984	3.58	34.36	0.48	3.15	600	4.71	34.13	0.50	3.18	27.04	109.2	1.052
1187	3.14	34.49	0.75	-	700	4.44	34.24	0.39	3.18	27.16	98.8	1.155
					800	4.13	34.33	0.35	3.18	27.26	89.3	1.250
					1000	3.55	34.36	0.50	(3.14)	27.34	82.3	1.422
50.130	BLACK DOUGLAS; July 20, 1950; 0323 GCT; 37°00'N, 130°00'W; sounding, 2,700 fm; wind, 340°, force 2; weather, overcast; sea, slight; wire angle, 8°.											
0	17.84	32.94E	4.61	0.68	0	17.84	32.94	4.61	0.68	23.76	415.4	0.000
10	17.42	32.97	4.81	0.69	10	17.42	32.97	4.81	0.69	23.88	404.3	0.041
25	17.16	32.97	4.49	0.69	20	17.27	32.98	4.52	0.69	23.93	400.0	0.081
49	13.24	32.83	5.13	0.78	30	16.65	32.94	4.51	0.70	24.04	389.5	0.121
74	12.31	32.83	5.41	0.91	50	13.23	32.83	5.15	0.78	24.68	328.2	0.192
98	10.36	33.17	4.75	1.42	75	12.25	32.83	5.40	0.91	24.88	310.1	0.272
152	8.11	33.57	3.52	1.94	100	9.95	33.20	4.72	1.45	25.58	243.9	0.341
199	7.68	33.87	2.34	2.29	150	8.13	33.56	3.56	1.92	26.14	190.6	0.450
292	6.74	34.07	1.65	2.70	200	7.67	33.87	2.33	2.30	26.46	161.7	0.538
389	5.90	34.09	1.04	3.07	250	7.17	34.03	1.91	2.54	26.66	143.4	0.614
482	5.36	34.16	0.38	3.24	300	6.65	34.07	1.60	2.74	26.76	134.3	0.684
581	4.76	34.23	0.39	3.34	400	5.85	34.10	0.92	3.10	26.88	123.0	0.812
776	3.90	34.34	0.36	3.36	500	5.25	34.17	0.36	3.26	27.01	111.7	0.930
972	3.43	34.45	0.42	3.31	600	4.66	34.24	0.39	3.35	27.13	100.4	1.036
1175	3.06	34.51	0.71	3.31	700	4.19	34.30	0.37	3.36	27.23	91.4	1.132
					800	3.83	34.36	0.37	3.36	27.32	83.8	1.219
					1000	3.87	34.46	0.45	3.30	27.39	78.5	1.382

a) Mean value of 3.07 and 3.25 μg at/L.

E Evaporation (see page 204).

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

BLACK DOUGLAS; July 17, 1950; 1622 GCT; 38°58'N, 124°00'W; sounding, 210 fm; wind, 350°, force 3; weather, overcast; sea, high; wire angle, 6°. 53.54

0	10.16	33.24E	6.23	1.16	0	10.16	33.24	6.23	1.16	25.57	242.5	0.000
10	10.22	33.30	6.16	1.24	10	10.22	33.30	6.16	1.24	25.61	239.2	0.024
25	10.53	33.57	5.74	1.52	20	10.49	33.50	5.92	1.44	25.72	229.1	0.048
50	8.50	33.73	4.31	2.07	30	10.50	33.61	5.51	1.69	25.80	221.4	0.070
63p	8.21	-	3.63	2.21	50	8.50	33.73	4.31	2.07	26.22	181.6	0.110
74	7.91	33.75	3.38	2.17	75	7.92	33.75	3.30	2.17	26.33	172.1	0.154
98	7.95	33.95	2.33	2.35	100	7.95	33.95	2.30	2.38	26.48	158.0	0.196
111p	7.90	33.95	2.20	2.55								

BLACK DOUGLAS; July 17, 1950; 0620 GCT; 38°38'N, 124°44'W; sounding, 2,050 fm; wind, 350°, force 6; weather, clear; sea, very rough; wire angle, 6°. 53.64

0	12.64	32.79E	5.62	0.85	0	12.64	32.79	5.62	0.85	24.77	318.7	0.000
10	12.70	32.77	5.44	0.81	10	12.70	32.77	5.44	0.81	24.75	321.3	0.032
25	12.61	32.75	5.60	0.86	20	12.64	32.75	5.59	0.82	24.74	321.9	0.064
50	10.26	32.79	5.43	1.20	30	12.60	32.75	5.59	0.93	24.75	321.4	0.096
75	9.50	32.88	5.20	1.36	50	10.26	32.79	5.43	1.20	25.21	278.3	0.156
99	9.33	33.01	5.40u	1.42	75	9.50	32.88	5.20	1.36	25.40	260.0	0.224
153	7.70	33.37	4.50	1.98	100	9.32	33.02	5.00	1.42	25.54	247.5	0.287
201	7.97	33.96	2.73	2.22	150	7.70	33.35	4.55	1.95	26.04	199.9	0.399
295	6.74	33.93	2.27	2.41	200	7.97	33.96	2.74	2.21	26.49	158.9	0.488
394	5.82	34.00	1.48	2.63	250	7.31	33.94	2.45	2.34	26.56	152.2	0.542
488	5.11	34.11	0.95	2.95	300	6.70	33.93	2.25	2.42	26.64	145.2	0.615
587	4.75	34.14	0.58	3.07	400	5.76	34.01	1.44	2.66	26.82	128.7	0.752
784	4.14	34.31	0.21	3.21	500	5.08	34.11	0.90	2.96	26.98	113.9	0.874
980	3.69	34.36	0.43	3.23	600	4.70	34.15	0.54	3.08	27.06	107.6	0.984
1183	3.25	34.49	0.64	3.32	700	4.38	34.23	0.30	3.18	27.16	98.8	1.088
					800	4.10	34.31	0.21	3.21	27.25	90.4	1.182
					1000	3.65	34.37	0.45	3.24	27.34	82.6	1.355

BLACK DOUGLAS; July 16, 1950; 1347 GCT; 38°24'N, 123°35'W; sounding, 130 fm; wind, 320°, force 1; weather, overcast; sea, slight; wire angle, 6°. 57.54

0	11.05	33.64E	5.09	1.41	0	11.05	33.64	5.09	1.41	25.73	227.7	0.000
10	10.83	33.62	4.86	1.55	10	10.83	33.62	4.86	1.55	25.75	225.7	0.023
25	10.33	33.68	4.18	1.91	20	10.48	33.65	4.37	1.83	25.83	217.9	0.045
50	9.14	33.78	3.57	2.22	30	10.04	33.71	4.05	1.97	25.96	206.4	0.066
75	8.47	33.84	2.20	2.34	50	9.14	33.78	3.57	2.22	26.16	187.3	0.105
99	8.34	33.91	1.77	2.44	75	8.47	33.84	2.20	2.34	26.31	173.4	0.150
152	7.98	34.02	1.54	2.51	100	8.34	33.91	1.77	2.44	26.39	166.7	0.193
200	7.70	34.09	1.53	2.59	150	7.99	34.02	1.55	2.51	26.53	154.2	0.273
					200	7.70	34.09	1.53	2.59	26.63	145.7	0.348

E Evaporation (see page 204).

SIO

CCOFI 5007

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

57.64 BLACK DOUGLAS; July 16, 1950; 2032 GCT; 38°04'N, 124°19'W; sounding, 2,130 fm; wind, 320°, force 4; weather, overcast; sea, rough; wire angle, 33°.

0	11.63	33.35E	5.78	1.32	0	11.63	33.35	5.78	1.32	25.40	259.2	0.000
8	11.60	33.35	5.71	1.30	10	11.50	33.35	5.70	1.30	25.42	257.1	0.026
21	11.17	33.49	6.58	1.41	20	11.18	33.48	6.58	1.40	25.58	242.2	0.051
46	10.78	33.53	5.96	1.41	30	11.09	33.50	6.51	1.41	25.61	239.6	0.075
66	9.06	33.62	3.91	2.10	50	10.35	33.54	5.77	1.43	25.77	224.4	0.121
89	8.64	33.64	4.20r	-	75	8.86	33.63	3.50	2.20	26.09	194.8	0.174
127	8.17	33.91	2.39	2.48	100	8.49	33.66	2.84	2.36	26.17	187.6	0.221
165	7.76	33.98	2.00	2.56	150	7.90	33.96	2.15	2.54	26.49	157.4	0.307
240	7.13	34.00	1.61	2.70	200	7.45	33.99	1.79	2.62	26.58	149.4	0.385
321	6.45	34.13	1.16	2.77	250	7.05	34.00	1.56	2.72	26.65	144.2	0.458
399	5.85	-	0.75	3.03	300	6.62	34.09	1.28	2.76	26.78	132.5	0.527
479	5.42	34.16	0.52	3.14	400	5.85	34.16	0.75	3.03	26.93	118.5	0.652
642	4.94	34.34	0.37	3.30	500	5.38	34.17	0.49	3.17	27.00	113.2	0.769
817	4.31	34.33	0.31	3.23	600	5.10	34.31	0.40	3.28	27.14	100.6	0.876
1000	3.78	34.42	0.52	3.28	700	4.72	34.34	0.34	3.28	27.21	94.7	0.973
					800	4.36	34.33	0.30	3.24	27.24	92.0	1.066
					1000	3.78	34.42	0.52	3.28	**27.37**	80.4	1.239

60.60 BLACK DOUGLAS; July 15, 1950; 2312 GCT; 37°37'N, 123°37'W; sounding, 1,860 fm; wind, 320°, force 2; weather, overcast; sea, rough; wire angle, 7°.

0	11.93	33.50E	5.45	1.55a)	0	11.93	33.50	5.45	1.55	25.46	253.5	0.000
10	11.60	33.39	5.47	1.52	10	11.60	33.39	5.47	1.52	25.43	255.8	0.025
25	10.91	33.53	5.21	1.62	20	11.18	33.42	5.34	1.57	25.54	246.5	0.050
50	9.44	33.72	3.91	2.07	30	10.55	33.64	5.05	1.74	25.82	219.9	0.074
74	8.67	33.75	2.88	2.15	50	9.44	33.72	3.91	2.07	26.07	196.6	0.116
99	8.49	33.87	2.48	2.26	75	8.65	33.75	2.87	2.15	26.22	182.6	0.163
151	8.06	34.05	1.83	2.55	100	8.49	33.87	2.45	2.27	26.33	171.8	0.207
198	7.58	34.07	1.49	2.68	150	8.07	34.05	1.88	2.55	26.54	153.3	0.288
292	7.00	34.13	1.09	2.84	200	7.58	34.07	1.48	2.69	26.63	145.5	0.363
390	6.38	34.18	0.76	2.94	250	7.26	34.10	1.24	2.78	26.70	139.5	0.434
483	5.78	34.25	0.65	3.31	300	6.94	34.13	1.06	2.86	26.76	134.4	0.503
581	5.26	34.27	0.44	3.20	400	6.30	34.19	0.75	2.95	26.90	122.2	0.631
774	4.72	34.41	0.31	3.19	500	5.67	34.26	0.63	3.09	27.03	110.1	0.748
966	4.18	34.42	0.41	3.21	600	5.20	34.28	0.42	3.20	27.10	104.1	0.855
1168	3.58	34.47	0.54	3.28	700	4.94	34.35	0.34	3.18	27.19	96.6	0.955
					800	4.65	34.42	0.31	3.18	27.28	88.9	1.048
					1000	4.09	34.42	0.43	3.22	27.34	84.0	1.220

60.70 BLACK DOUGLAS; July 15, 1950; 1603 GCT; 37°17'N, 124°21'W; sounding, 2,225 fm; wind, 340°, force 5; weather, cloudy; sea, very rough; wire angle, 15°.

0	13.16	33.35E	5.99	-	0	13.16	33.35	5.99		25.11	257.0	0.000
10	13.25	33.31	5.95	0.92	10	13.25	33.31	5.95	0.92	25.06	292.0	0.029
24	10.58	33.49	5.34	1.59	20	12.00	33.44	5.59	1.00	25.40	259.4	0.056
53	9.46	33.68	4.34	1.89	30	10.24	33.54	5.10	1.67	25.79	222.3	0.080
76	9.17	33.75	3.86	2.03	50	9.54	33.66	4.45	1.85	26.00	202.5	0.123
104	8.31	33.84	2.96	2.22	75	9.19	33.75	3.90	2.03	26.13	190.9	0.172
155	7.88	33.99	2.42	2.29	100	8.37	33.83	3.06	2.20	26.32	173.1	0.218
207	7.20	34.02	2.67r	2.37	150	7.94	33.98	2.45	2.29	26.50	156.4	0.300
310	6.56	34.13	1.25	2.84	200	7.31	34.02	(2.00)	2.36	26.63	145.4	0.376
417	5.50	34.18	0.90	2.95	250	6.85	34.06	(1.60)	2.60	26.72	137.1	0.446
519	4.97	34.23	0.54	3.17	300	6.60	34.12	(1.30)	2.83	26.80	130.0	0.513
622	4.46	34.34	0.57	3.21	400	5.63	34.17	0.95	2.94	26.96	115.2	0.636
824	3.97	34.43	0.41	3.31	500	5.08	34.22	0.60	3.13	27.07	105.9	0.746
1029	3.57	34.52	0.61	3.30	600	4.55	34.31	0.55	3.20	27.20	93.9	0.846
1230	3.18	34.58	0.82	3.22	700	4.20	34.39	0.50	3.27	27.30	85.0	0.935
					800	4.00	34.42	0.43	3.30	27.35	81.2	1.018
					1000	3.63	34.50	0.57	3.30	27.45	72.8	1.173

a) Many double values; the smoothest property distribution was obtained from the values listed.

E Evaporation (see page 204).

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	µg at/L	m	°C	‰	ml/L	µg at/L	g/L	$10^5 cm^3/g$	dyn. m

BLACK DOUGLAS; July 15, 1950; 0419, 0516 GCT; 36°57'N, 125°04'W; sounding, 2,400 fm; wind, 350°, force 6; weather, overcast; sea, high; wire angle, 5°, 5°. 60.80

0	13.13	33.44E	5.30	1.02a)	0	13.13	33.44	5.30	1.02	25.18	280.2	0.000
10	13.15	33.44	5.64	1.00	10	13.15	33.44	5.64	1.00	25.18	280.6	0.028
25	13.15	33.40	5.62	0.97	20	13.15	33.42	5.64	0.98	25.16	282.2	0.056
55	8.98	33.26	-	1.57	30	13.15	33.36	(5.55)	0.99	25.11	286.9	0.085
79	8.33	33.57	3.84	1.88	50	9.80	33.26	(4.70)	1.42	25.65	236.2	0.137
108	8.02	33.68	3.70	2.03	75	8.40	33.48	(3.88)	1.85	26.04	199.2	0.191
161	7.84	34.02	2.31	2.35	100	8.09	33.66	3.75	2.00	26.23	181.6	0.239
214	7.24	34.07	1.88	2.61	150	7.86	33.99	2.59	2.26	26.52	154.5	0.323
319	6.35	34.14	1.10	2.87	200	7.41	34.06	1.95	2.54	26.64	143.7	0.398
430	5.37	34.14	0.70	3.07	250	6.95	34.09	1.68	2.71	26.73	136.2	0.467
537	4.99	34.23	0.44	3.18	300	6.51	34.13	1.25	2.83	26.82	128.0	0.534
644	4.66	34.36	0.35	3.20	400	5.59	34.14	0.79	3.02	26.95	116.8	0.656
					500	5.12	34.17	0.53	3.14	27.03	110.1	0.770
840	4.12	34.40	0.37	3.24	600	4.79	34.31	0.36	3.20	27.18	96.8	0.873
1047	3.55	34.51	0.61	3.22	700	4.51	34.38	0.35	3.22	27.26	89.0	0.966
1248	3.10	34.54	0.79	3.15	800	4.24	34.40	0.36	3.24	27.31	85.5	1.053
					1000	3.67	34.48	0.55	3.22	27.43	74.7	1.213

BLACK DOUGLAS; July 14, 1950; 1643 GCT; 36°37'N, 125°47'W; sounding, 2,480 fm; wind, 350°, force 7; weather, overcast; sea, high; wire angle, 0°. 60.90

0	14.41	33.17E	5.66	0.76	0	14.41	33.17	5.66	0.76	24.71	324.7	0.000
10	14.42	33.16	5.79	0.78	10	14.42	33.16	5.79	0.78	24.70	325.7	0.032
25	14.39	33.15	5.69	0.88	20	14.40	33.15	5.73	0.84	24.70	326.4	0.065
55	11.68	33.12	5.76	1.08	30	14.38	33.15	5.70	0.90	24.70	326.3	0.098
80	9.69	33.19	5.09	1.42	50	12.35	33.12	5.76	1.04	25.08	290.1	0.159
110	8.45	33.39	4.10	1.77	75	10.00	33.17	5.35	1.33	25.54	246.6	0.226
164	8.01	33.80	2.91	2.17	100	8.70	33.21	4.42	1.68	25.86	216.5	0.284
217	7.21	33.89	3.02r	2.25	150	8.18	33.72	3.15	2.09	26.26	179.3	0.383
322	6.39	34.00	1.45	2.70	200	7.40	33.87	2.46	2.20	26.50	157.7	0.467
432	5.64	34.13	0.88	3.00	250	6.95	33.93	2.00	2.39	26.61	148.0	0.544
537	4.52	34.14	0.74	3.09	300	6.57	33.98	1.60	2.61	26.70	139.9	0.616
642	4.45	34.25	0.48	3.07	400	5.87	34.10	1.04	2.94	26.88	123.3	0.748
849	3.98	34.38	0.39	3.10	500	4.80	34.14	0.76	3.06	27.04	108.5	0.863
1060	3.48	34.45	0.53	3.13	600	4.50	34.19	0.60	3.08	27.11	102.2	0.969
1264	3.06	34.47	0.91	3.01	700	4.35	34.31	0.42	3.09	27.22	92.5	1.066
					800	4.11	34.36	0.39	3.10	27.29	86.9	1.156
					1000	3.58	34.43	0.48	3.12	27.40	77.4	1.320

BLACK DOUGLAS; July 14, 1950; 0715 GCT; 36°17'N, 126°30'W; sounding, 2,540 fm; wind, 360°, force 6; weather, overcast; sea, very rough; wire angle, 24°. 60.100

0	16.28	33.08E	5.24	0.46	0	16.28	33.08	5.24	0.46	24.23	370.3	0.000
9	16.31	33.08	5.41	0.45	10	16.30	33.08	5.41	0.45	24.22	371.1	0.037
22	16.28	33.08	5.44	0.49	20	16.29	33.08	5.44	0.48	24.23	371.1	0.074
50	15.60	33.04	5.32	0.50	30	16.28	33.08	5.43	0.49	24.23	371.3	0.111
72	13.74	32.97	5.05	0.55	50	15.60	33.04	5.32	0.50	24.35	360.0	0.184
98	11.64	32.83	5.44r	0.84	75	13.73	32.95	4.02	0.57	24.68	329.0	0.271
143	10.06	33.22	4.87	1.31	100	11.54	32.83	5.00	0.84	25.01	298.0	0.349
187	8.14	33.44	4.16	1.83	150	9.84	33.26	4.79	1.37	25.64	238.7	0.483
274	7.18	33.93	3.00	2.12	200	7.90	33.50	3.97	1.90	26.13	192.4	0.590
364	6.20	34.00	1.95	2.51	250	7.40	33.82	3.32	2.06	26.46	162.3	0.680
451	5.42	34.04	1.30	2.67	300	6.90	33.97	2.67	2.26	26.64	145.1	0.756
539	4.72	34.09	1.03	2.93	400	5.86	34.01	1.64	2.58	26.81	129.9	0.894
716	4.10	34.22	0.54	3.14b)	500	5.01	34.07	1.13	2.80	26.96	116.2	1.017
903	3.94	34.33	0.54	3.22	600	4.41	34.13	0.85	3.03	27.07	105.8	1.128
1090	3.41	34.43	0.58	3.12c)	700	4.12	34.21	0.56	3.13	27.17	97.2	1.229
					800	4.05	34.29	0.55	3.18	27.24	91.4	1.324
					1000	3.65	34.42	0.56	3.18	27.38	78.9	1.494

a) Many double values; the smoothest property distribution was obtained from the values listed.
b) Mean value of 3.05 and 3.24 µg at/L.
c) Mean value of 3.02 and 3.20 µg at/L.
E Evaporation (see page 204).

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

60.110 BLACK DOUGLAS; July 13, 1950; 2356 GCT; 35°57'N, 127°12'W; sounding, 2,630 fm; wind, 360°, force 5; weather, overcast; sea, very rough; wire angle, 22°.

0	16.06	33.06E	3.48r	0.51	0	16.06	33.06	(4.77)	0.51	24.26	367.3	0.000
9	16.07	33.01	4.77	0.58	10	16.07	33.01	4.77	0.58	24.22	371.2	0.037
23	16.07	33.06	5.60	0.53	20	16.07	33.06	5.51	0.53	24.26	367.9	0.074
51	14.94	32.94	5.28r	0.61	30	16.05	33.05	5.75	0.54	24.26	368.4	0.111
74	12.35	32.86	6.07	0.66	50	14.99	32.95	5.97	0.61	24.42	353.9	0.183
102	10.79	33.86	5.30r	0.86	75	12.20	32.86	6.06	0.66	24.91	307.1	0.266
151	9.74	33.10	5.61	1.36	100	10.88	32.86	6.03	0.84	25.15	284.4	0.339
200	8.74	33.60	3.89	1.89	150	9.77	33.09	5.61	1.34	25.52	250.1	0.473
300	7.55	34.07	2.24	2.23	200	8.74	33.60	3.89	1.89	26.08	198.1	0.586
403	6.86	34.16	1.21	2.63	250	8.05	33.93	2.95	2.08	26.45	163.4	0.676
502	5.94	34.22	0.75	2.88	300	7.55	34.07	2.24	2.23	26.63	146.6	0.753
601	5.32	34.26	0.48	3.10	400	6.89	34.16	1.25	2.62	26.79	132.3	0.892
798	4.13	34.34	0.38	3.17	500	5.97	34.22	0.77	2.88	26.96	116.9	1.017
1001	3.61	34.43	0.48	3.15	600	5.34	34.26	0.50	3.09	27.07	107.3	1.129
1199	3.22	34.54	0.78	3.07	700	4.66	34.30	0.40	3.15	27.18	96.9	1.231
					800	4.13	34.34	0.40	3.17	27.27	88.6	1.324
					1000	3.62	34.43	0.49	3.16	27.39	77.9	1.490

60.120 BLACK DOUGLAS; July 13, 1950; 1451, missing GCT; 35°37'N, 127°54.5'W; sounding, 2,610 fm; wind, 360°, force 5; weather, overcast; sea, very rough; wire angle, 22°, missing.

0	16.36	33.10E	4.58	0.65	0	16.36	33.10	4.58	0.65	24.23	370.6	0.000
9	16.39	33.06	4.79	0.58	10	16.39	33.06	4.79	0.58	24.19	374.2	0.037
23	16.37	33.06	4.76	0.56	20	16.38	33.06	4.76	0.56	24.19	374.5	0.075
46	15.68	33.08	5.30	0.52	30	16.35	33.06	4.80	0.55	24.20	374.2	0.112
					50	15.67	33.10	5.37	0.53	24.38	357.5	0.185
74	13.23	33.30	5.55	0.72	75	13.08	33.30	5.54	0.72	25.08	290.9	0.266
102	10.42	33.35	4.71	1.22	100	10.57	33.35	4.75	1.18	25.59	243.1	0.333
203p	8.29	33.91	4.16	1.56	150	9.00	33.55	4.50	1.40	26.00	204.1	0.444
304p	7.12	34.09	1.68	2.45	200	8.33	33.90	4.24	1.54	26.38	168.8	0.538
402p	6.22	34.14	0.95	2.76	250	7.79	34.01	2.77	2.07	26.55	153.8	0.618
502p	5.59	34.27	0.68	2.92	300	7.17	34.08	1.78	2.41	26.69	140.6	0.693
701p	4.19	34.29	0.47	3.02	400	6.24	34.14	0.95	2.76	26.86	125.2	0.825
937p	3.77	34.43	0.53	3.11	500	5.62	34.27	0.70	2.92	27.05	108.9	0.942
1140p	3.26	34.51	0.59	2.98	600	4.80	34.28	0.54	2.97	27.15	99.2	1.047
					700	4.20	34.29	0.48	3.02	27.22	92.3	1.142
					800	3.95	34.35	0.50	3.08	27.30	85.8	1.231
					1000	3.65	34.46	0.55	3.08	27.41	76.0	1.393

60.130 BLACK DOUGLAS; July 13, 1950; 0638 GCT; 35°17'N, 128°37'W; sounding, 2,560 fm; wind, 360°, force 3; weather, overcast; sea, rough; wire angle, 15°.

0	16.89	32.94E	5.68	0.59	0	16.89	32.94	5.68	0.59	23.98	393.9	0.000
10	16.91	32.97	5.72	0.58	10	16.91	32.97	5.72	0.58	24.00	392.3	0.039
24	16.94	32.97	5.50	0.56	20	16.93	32.97	5.54	0.57	24.00	393.2	0.078
48	14.81	33.12	6.06	0.54	30	16.90	32.97	5.53	0.56	24.00	392.9	0.118
72	13.05	33.01	6.16	0.52	50	14.54	33.12	6.08	0.54	24.64	332.3	0.190
96	11.92	32.97	5.60	0.61	75	12.94	33.00	6.16	0.53	24.88	310.4	0.271
145	8.96	33.01	5.47	1.25	100	11.65	32.97	5.56	0.66	25.10	289.5	0.346
188	8.56	33.57	4.89	1.47	150	8.90	33.03	5.44	1.30	25.61	241.0	0.478
271	7.76	33.96	4.37	1.66	200	8.49	33.73	4.80	1.50	26.22	184.0	0.585
358	6.38	34.04	2.09	2.47	250	8.03	33.92	4.51	1.60	26.44	163.9	0.672
442	5.50	34.07	1.59	2.73	300	7.22	34.00	3.95	1.89	26.62	147.1	0.749
532	4.89	34.13	0.98	2.86	400	5.91	34.06	1.84	2.63	26.84	126.8	0.886
712	4.21	34.29	0.40	3.04	500	5.08	34.10	1.20	2.81	26.98	114.7	1.007
895	3.82	34.42	0.37	3.03	600	4.58	34.19	0.68	2.94	27.10	103.1	1.116
1091	3.42	34.47	0.65	2.96	700	4.25	34.28	0.41	3.04	27.21	93.6	1.214
					800	4.00	34.36	0.38	3.04	27.30	85.6	1.303
					1000	3.60	34.46	0.45	3.00	27.42	75.4	1.464

E Evaporation (see page 204).

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	61.55
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
BLACK DOUGLAS; July 16, 1950; 0349 GCT; 37°37'N, 123°07.5'W; sounding, 580 fm; wind, calm; weather, overcast; sea, moderate; wire angle, 11°.													
0	13.92	33.40E	5.37	0.85a)	0	13.92	33.40	5.37	0.85	24.99	298.4	0.000	
10	12.14	33.40	5.03	1.08	10	12.14	33.40	5.03	1.08	25.34	264.8	0.028	
25	9.81	33.32	4.49	1.64	20	10.50	33.35	4.68	1.47	25.59	241.2	0.053	
49	9.21	33.71	3.35	2.07	30	9.63	33.36	4.29	1.78	25.75	225.9	0.077	
73	8.86	33.87	2.77	2.22	50	9.20	33.72	3.30	2.07	26.11	192.7	0.119	
97	8.73	33.93	2.52	2.33	75	8.85	33.87	2.75	2.24	26.28	176.8	0.165	
149	8.33	33.99	2.12	2.44	100	8.71	33.93	2.50	2.34	26.35	170.7	0.208	
196	7.96	34.05	1.83	2.56	150	8.33	33.99	2.11	2.44	26.45	161.4	0.291	
290	7.21	34.13	1.50	3.01	200	7.92	34.06	1.81	2.58	26.57	151.0	0.370	
390	6.45	34.18	0.97	3.30r	250	7.53	34.10	1.60	2.83	26.66	143.4	0.443	
485	5.96	34.20	0.65	3.19	300	7.15	34.14	1.45	3.02	26.74	135.9	0.513	
586	5.48	34.25	0.51	3.28	400	6.39	34.18	0.93	3.10	26.88	124.1	0.643	
683	5.03	34.28	0.40	3.25	500	5.90	34.21	0.63	3.21	26.96	116.7	0.764	
786	4.82	34.33	0.42	3.10	600	5.41	34.25	0.49	3.28	27.05	109.0	0.876	
886	4.50	34.38	0.37	2.94	700	5.00	34.29	0.40	3.22	27.14	101.6	0.982	
					800	4.78	34.33	0.40	3.08	27.19	97.2	1.081	
					1000	(4.21)	(34.41)			(27.32)	(86.3)	(1.265)	
BLACK DOUGLAS; July 7, 1950; 0645 GCT; 37°09'N, 122°58'W; sounding, 320 fm; wind, 320°, force 3; weather, cloudy; sea, rough; wire angle, 11°.													63.57
0	12.76	33.43E	5.83	0.59	0	12.76	33.43	5.83	0.59	25.25	273.5	0.000	
10	12.70	33.48	5.18	0.71	10	12.70	33.48	5.18	0.71	25.30	269.2	0.027	
25	10.97	33.39	5.17	1.25	20	11.42	33.42	5.18	1.00	25.49	250.6	0.053	
50	9.32	33.54	4.20	1.70	30	10.35	33.39	5.08	1.41	25.66	235.0	0.077	
74	8.55	33.69	3.49	2.02	50	9.32	33.54	4.20	1.70	25.94	208.1	0.122	
98	8.12	33.78	3.82	1.82	75	8.50	33.69	3.47	2.02	26.19	185.1	0.171	
151	8.11	33.93	2.52	2.06	100	8.13	33.78	3.82	1.82	26.32	173.3	0.216	
199	7.81	34.04	2.14	2.54r	150	8.12	33.93	2.51	2.06	26.44	162.7	0.299	
246	7.39	34.09	1.31	2.41	200	7.79	34.04	2.13	2.28	26.57	150.7	0.378	
293	7.15	34.09	0.99	2.44	250	7.37	34.09	1.27	2.42	26.67	142.1	0.451	
346	6.72	34.13	1.09r	2.40r	300	7.08	34.09	(0.99)	(2.44)	26.71	138.7	0.522	
394	6.42	34.16	1.36r	2.42r	400	(6.40)	(34.16)			(26.86)	(125.8)	(0.654)	
BLACK DOUGLAS; July 7, 1950; 1443 GCT; 36°49' N, 123°41'W; sounding, 2,040 fm; wind, 320°, force 4; weather, cloudy; sea, very rough; wire angle, 32°.													63.67
0	14.07	33.35E	6.02	0.55	0	14.07	33.35	6.02	0.55	24.92	304.9	0.000	
8	14.12	33.33	5.86	0.58	10	14.11	33.33	5.81	0.59	24.89	307.3	0.030	
21	14.09	33.31	5.53	0.79	20	14.10	33.31	5.55	0.76	24.88	308.8	0.061	
46	9.70	33.44	4.52	1.10	30	12.60	33.33	5.17	0.93	25.20	278.8	0.091	
68	9.15	33.49	4.04	1.68	50	9.46	33.45	4.39	1.20	25.85	216.8	0.140	
92	8.99	33.69	3.16	1.84	75	9.09	33.51	3.74	1.74	25.96	207.1	0.193	
133	8.33	33.90	2.60	2.05	100	8.92	33.76	3.01	1.89	26.18	186.4	0.242	
172	7.87	34.02	2.14	2.27	150	8.12	33.95	2.41	2.14	26.45	161.3	0.329	
251	7.30	34.09	1.26	2.48	200	7.64	34.06	1.81	2.35	26.61	147.1	0.407	
334	6.52	34.18	0.93	2.79	250	7.31	34.09	1.27	2.47	26.68	140.9	0.478	
414	5.99	34.23	0.73	2.84	300	6.85	34.14	1.00	2.68	26.78	131.9	0.546	
494	5.37	34.23	0.45	2.96	400	6.07	34.23	0.77	2.83	26.96	116.2	0.670	
657	4.75	34.33	0.47	3.02	500	5.35	34.23	0.45	2.96	27.05	108.5	0.783	
833	4.16	34.45	0.41	3.00	600	4.99	34.27	0.45	3.02	27.12	102.1	0.889	
1019	3.74	34.40	0.56	2.94	700	4.57	34.37	0.45	3.02	27.25	90.5	0.985	
					800	4.25	34.44	0.42	3.00	27.34	82.6	1.071	
					1000	3.79	34.40	0.55	2.95	27.35	82.0	1.236	

a) Many double values; the smoothest property distribution was obtained from the values listed.
E Evaporation (see page 204).

SIO

CCOFI 5007

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

67.55 BLACK DOUGLAS; July 9, 1950; 2213 GCT; 36°39'N, 122°26'W; sounding, 1,140 fm; wind, 300°, force 3; weather, overcast; sea, moderate; wire angle, 15°.

0	13.47	33.49E	6.11	0.86	0	13.47	33.49	6.11	0.86	25.15	282.4	0.000
10	12.56	33.51	6.45	0.98	10	12.56	33.51	6.45	0.98	25.35	264.2	0.027
24	10.41	33.53	5.36	1.38	20	11.20	33.52	6.13	1.34	25.61	239.6	0.052
53	9.74	33.68	4.10	1.65	30	10.19	33.54	5.00	1.42	25.80	221.4	0.076
77	9.23	33.77	3.23	1.90	50	9.79	33.66	4.23	1.64	25.96	206.6	0.118
105	8.73	33.89	2.47	2.08	75	9.27	33.76	3.30	1.88	26.13	191.3	0.168
157	8.22	34.02	1.91	2.26	100	8.78	33.86	2.55	2.06	26.28	176.8	0.214
209	7.70	34.04	1.65	2.34	150	8.29	34.01	1.96	2.24	26.47	159.3	0.298
313	7.04	34.14	1.05	2.60	200	7.77	34.04	1.70	2.33	26.58	150.5	0.376
422	6.20	34.20	0.59	2.81	250	7.45	34.07	1.40	2.43	26.65	144.3	0.449
527	5.68	34.38	0.39	2.99	300	7.15	34.12	1.13	2.56	26.73	137.3	0.520
633	5.30	34.33	0.39	2.88	400	6.35	34.19	0.67	2.78	26.89	122.9	0.650
844	4.35	34.40	0.39	3.09	500	5.81	34.35	0.42	2.94	27.08	105.5	0.764
1056	3.80	34.45	0.70	3.06	600	5.43	34.34	0.40	2.91	27.12	102.5	0.868
1260	3.41	34.45	-	2.98	700	4.98	34.35	0.40	2.92	27.19	97.1	0.968
					800	4.51	34.39	0.40	3.03	27.27	89.3	1.061
					1000	3.93	34.44	0.59	3.06	27.37	80.7	1.231

67.65 BLACK DOUGLAS; July 9, 1950; 1513 GCT; 36°19'N, 123°09'W; sounding, 1,790 fm; wind, 320°, force 2; weather, fog; sea, moderate; wire angle, 25°.

0	14.43	33.35E	6.03	0.46	0	14.43	33.35	6.03	0.46	24.84	311.9	0.000
9	14.43	33.37	5.73	0.43	10	14.43	33.37	5.70	0.43	24.86	310.8	0.031
22	14.37	33.37	5.16	0.49	20	14.40	33.37	5.25	0.48	24.87	310.4	0.062
44	9.94	33.31	4.21	1.67	30	11.00	33.36	4.80	0.80	25.52	248.1	0.090
66	9.29	33.62	3.43	1.83	50	9.79	33.33	4.01	1.69	25.71	230.7	0.138
87	8.77	33.77	2.20	2.01	75	9.05	33.69	2.54	1.90	26.11	193.2	0.191
133	8.29	33.95	2.17	2.22	100	8.57	33.82	2.22	2.09	26.28	176.7	0.237
174	7.86	34.02	1.94	2.28	150	8.14	33.98	2.09	2.24	26.47	159.4	0.321
256	6.90	34.05	1.26	2.47	200	7.49	34.03	1.74	2.33	26.61	147.1	0.398
342	6.47	34.18	0.73	2.79	250	6.93	34.05	1.30	2.45	26.70	138.8	0.469
423	5.48	34.13	0.65	2.78	300	6.72	34.12	0.90	2.65	26.79	131.6	0.537
509	5.28	34.25	0.33	2.85	400	5.62	34.14	0.65	2.78	26.94	117.3	0.662
679	4.65	34.49	0.24	3.01	500	5.33	34.23	0.36	2.84	27.05	108.3	0.775
852	4.16	34.40	0.42	3.01	600	4.93	34.39	0.27	2.96	27.22	92.5	0.875
1045	3.58	34.51	0.53	2.92	700	4.60	34.48	0.25	3.01	27.33	82.9	0.962
					800	4.30	34.42	0.35	3.01	27.32	84.7	1.046
					1000	3.73	34.48	0.50	2.95	27.42	75.5	1.206

70.55 BLACK DOUGLAS; July 10, 1950; 0530 GCT; 36°03'N, 122°02'W; sounding, 740 fm; wind, 320°, force 2; weather, overcast; sea, moderate; wire angle, 11°.

0	14.82	33.24E	6.17	0.54	0	14.82	33.24	6.17	0.54	24.68	327.8	0.000
10	14.85	33.22	6.34	0.57	10	14.85	33.22	6.34	0.57	24.65	330.9	0.033
25	12.66	33.40	5.91	0.96	20	13.50	33.27	6.17	0.76	24.97	299.9	0.064
49	10.23	33.48	4.84	1.53	30	12.06	33.43	5.69	1.07	25.38	261.6	0.092
73	9.58	33.62	3.06	1.81	50	10.13	33.48	4.45	1.53	25.76	225.3	0.141
98	9.22	33.80	2.86	2.00	75	9.56	33.64	3.00	1.82	25.99	204.7	0.195
152	8.27	33.89	2.69	2.17	100	9.18	33.80	2.86	2.01	26.17	187.4	0.244
200	7.75	34.00	2.03	2.30	150	8.30	33.89	2.70	2.16	26.38	168.3	0.333
294	6.72	34.07	1.47	2.58	200	7.75	34.00	2.03	2.30	26.55	153.0	0.414
392	6.02	34.16	1.07	2.71	250	7.19	34.05	1.65	2.47	26.67	142.3	0.487
487	6.04	34.27	0.59	2.87	300	6.67	34.07	1.45	2.59	26.75	134.6	0.556
586	5.45	34.29	0.39	2.94	400	6.01	34.17	1.02	2.73	26.92	120.0	0.683
786	4.65	34.40	0.36	2.99	500	6.00	34.27	0.57	2.88	27.00	113.6	0.800
984	4.08	34.45	0.47	2.98	600	5.38	34.29	0.40	2.94	27.09	105.6	0.910
1189	3.48	34.52	0.70	2.97	700	4.94	34.34	0.36	2.98	27.18	97.3	1.012
					800	4.62	34.41	0.37	2.99	27.27	89.2	1.105
					1000	4.05	34.45	0.49	2.98	27.37	81.4	1.276

E Evaporation (see page 204).

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

BLACK DOUGLAS; July 10, 1950; 1019 GCT; 35°53'N, 122°23'W; sounding, 1,740 fm; wind, 320°, force 3; weather, overcast; sea, moderate; wire angle, 12°. 70.60

0	14.70	33.37E	5.68	0.51	0	14.70	33.37	5.68	0.51	24.80	315.9	0.000
10	14.71	33.33	5.86	0.52	10	14.71	33.33	5.86	0.52	24.77	319.1	0.032
25	11.73	33.06	6.01	1.02	20	12.47	33.07	5.99	0.67	25.02	295.2	0.062
49	9.60	33.26	5.14	1.58	30	11.24	33.06	6.00	1.20	25.24	271.4	0.091
73	9.13	33.60	3.64	1.93	50	9.56	33.36	4.95	1.59	25.77	225.0	0.140
97	8.94	33.60	2.95	1.96	75	9.12	33.60	3.55	1.94	26.03	200.9	0.194
147	8.34	33.93	2.23	2.18	100	8.92	33.60	2.85	1.97	26.06	198.4	0.244
193	7.87	34.02	1.90	2.35	150	8.31	33.94	2.22	2.20	26.42	164.7	0.334
285	7.00	34.07	1.33	2.60	200	7.81	34.02	1.86	2.38	26.56	152.4	0.414
381	6.25	34.16	0.88	2.75	250	7.34	34.05	1.55	2.52	26.65	144.3	0.488
473	5.60	34.22	0.44	2.92	300	6.90	34.08	1.28	2.62	26.73	137.0	0.558
569	5.15	34.29	0.36	2.95	400	6.08	34.18	0.76	2.79	26.92	119.9	0.686
758	4.40	34.36	0.33	2.98	500	5.46	34.24	0.40	2.94	27.04	109.0	0.801
946	3.88	34.40	0.44	2.99	600	5.00	34.31	0.34	2.96	27.15	99.3	0.906
1145	3.47	34.45	0.68	2.94	700	4.61	34.35	0.33	2.97	27.23	92.5	1.000
					800	4.28	34.37	0.35	2.99	27.28	88.1	1.092
					1000	3.76	34.41	0.50	2.99	27.36	80.9	1.261

BLACK DOUGLAS; July 10, 1950; 1743 GCT; 35°33'N, 123°06'W; sounding, 2,080 fm; wind, 320°, force 4; weather, overcast; sea, rough; wire angle, 18°. 70.70

0	14.81	33.26E	5.28	0.59	0	14.81	33.26	5.28	0.59	24.70	325.9	0.000
10	14.84	33.26	5.41	0.61	10	14.84	33.26	5.41	0.61	24.69	326.8	0.033
24	14.18	33.30	5.34	0.87	20	14.27	33.28	5.38	0.80	24.82	314.2	0.065
52	10.22	33.35	5.19	1.26	30	14.15	33.32	5.33	0.97	24.88	309.3	0.096
76	9.28	33.40	4.35	1.63	50	10.60	33.35	5.24	1.23	25.58	242.5	0.151
104	8.55	33.60	3.38	1.89	75	9.29	33.40	4.35	1.63	25.84	218.4	0.209
154	8.36	33.91	3.03	2.19	100	8.59	33.56	3.50	1.87	26.08	196.3	0.260
204	7.96	34.02	1.65	2.39	150	8.37	33.89	3.11	2.18	26.37	169.2	0.352
302	7.31	34.14	1.20	2.63	200	7.99	34.01	1.69	2.38	26.52	155.7	0.433
406	6.78	34.18	0.75	2.84	250	7.62	34.08	1.46	2.51	26.63	146.2	0.509
506	5.38	34.16	0.66	2.94	300	7.32	34.14	1.23	2.62	26.72	138.2	0.579
607	5.40	34.31	0.33	3.03	400	6.82	34.18	0.76	2.82	26.82	130.1	0.713
808	4.46	34.38	0.38	3.08	500	5.40	34.16	0.67	2.93	26.99	114.2	0.836
1013	3.91	34.45	0.76	3.11	600	5.40	34.30	0.34	3.02	27.09	105.2	0.945
1214	3.36	34.49	1.17	3.04	700	5.05	34.35	0.35	3.06	27.18	97.9	1.047
					800	4.50	34.38	0.38	3.08	27.26	89.9	1.141
					1000	3.94	34.44	0.74	3.11	27.37	80.9	1.312

BLACK DOUGLAS; July 11, 1950; 0046, 0150 GCT; 35°13'N, 123°48'W; sounding, 2,240 fm; wind, 340°, force 5; weather, cloudy; sea, rough; wire angle, 14°, 18°. 70.80

0	14.60	33.40E	5.72	0.76a)	0	14.60	33.40	5.72	0.76	24.85	311.6	0.000
10	14.59	33.40	4.40	0.69	10	14.59	33.40	4.40	0.69	24.85	311.9	0.031
24	14.07	33.31	4.46	0.82	20	14.29	33.32	4.44	0.76	24.85	311.9	0.062
53	9.72	33.69	3.21	1.68	30	13.19	33.31	4.42	1.00	25.07	291.4	0.092
78	9.06	33.77	2.99	1.95	50	10.10	33.66	3.25	1.57	25.91	211.5	0.143
107	8.53	33.87	2.17	2.23	75	9.10	33.76	3.05	1.93	26.15	188.6	0.193
159	7.93	33.96	1.99	2.30	100	8.61	33.84	2.20	2.18	26.29	175.9	0.238
211	7.30	–	1.47	2.51	150	8.03	33.95	2.05	2.29	26.47	160.0	0.322
313	6.39	34.13	0.95	2.64	200	7.42	(34.01)	1.56	2.45	26.60	147.5	0.400
420	5.39	34.16	0.65	2.86	250	6.95	(34.07)	1.20	2.61	26.72	137.7	0.470
523	5.26	34.31	0.24	3.12	300	6.51	(34.12)	1.00	2.64	26.81	128.8	0.537
627	4.92	34.34	0.36	3.15	400	5.43	34.16	0.72	2.80	26.98	113.5	0.658
					500	5.31	34.27	0.27	3.06	27.08	105.0	0.768
818	4.23	34.38	0.42	3.18	600	5.03	34.34	0.33	3.15	27.17	97.4	0.869
1027	3.71	34.47	0.61	3.20	700	4.64	34.35	0.37	3.16	27.22	93.0	0.964
1230	3.30	34.52	0.80	3.04	800	4.29	34.37	0.41	3.18	27.28	88.2	1.054
					1000	3.78	34.46	0.59	3.20	27.40	77.4	1.220

a) Many double values; the smoothest property distribution was obtained from the values listed.
E Evaporation (see page 204).

SIO

CCOFI 5007

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

70.90 BLACK DOUGLAS; July 11, 1950; 0843 GCT; 34°53'N, 124°30'W; sounding, 2,340 fm; wind, 330°, force 5; weather, partly cloudy; sea, very rough; wire angle, 10°.

0	14.49	33.08E	5.95	0.61	0	14.49	33.08	5.95	0.61	24.62	332.9	0.000
10	14.52	33.04	5.72	0.58	10	14.52	33.04	5.72	0.58	24.58	337.2	0.033
25	14.51	33.04	5.66	0.62	20	14.51	33.04	5.67	0.59	24.58	334.9	0.067
54	10.07	32.90	5.57	1.07	30	14.51	33.03	5.64	0.68	24.58	337.8	0.101
78	9.22	33.19	4.71	1.41	50	11.00	32.91	5.58	0.98	25.17	281.6	0.163
106	9.02	33.62	3.41r	1.68r	75	9.28	33.15	4.74	1.40	25.65	236.7	0.228
157	8.34	33.91	4.33	1.51	100	9.09	33.55	4.63	1.44	25.99	204.4	0.282
207	7.40	33.95	3.82	1.81	150	8.45	33.89	4.38	1.50	26.36	170.6	0.376
308	6.12	33.96	2.14	2.41	200	7.55	33.95	3.93	1.78	26.54	153.9	0.457
413	5.60	34.11	1.04	2.72	250	6.89	33.96	3.10	2.10	26.64	145.0	0.532
513	5.38	34.25	0.53	2.94	300	6.24	33.96	2.27	2.37	26.72	137.1	0.603
614	4.94	34.29	0.41	3.04	400	5.63	34.08	1.15	2.70	26.89	121.8	0.732
811	4.20	34.38	0.42	3.02	500	5.43	34.24	0.57	2.91	27.04	108.7	0.847
1012	3.69	34.45	0.64	3.01	600	5.00	34.29	0.41	3.03	27.14	100.8	0.952
1211	3.24	34.52	0.83	2.89	700	4.58	34.33	0.41	3.03	27.21	93.7	1.049
					800	4.24	34.37	0.42	3.02	27.28	87.7	1.140
					1000	3.74	34.45	0.62	3.01	27.40	77.8	1.305

70.100 BLACK DOUGLAS; July 11, 1950; 1605 GCT; 34°33'N, 125°12'W; sounding, 2,520 fm; wind, 350°, force 4; weather, cloudy; sea, very rough; wire angle, 20°.

0	15.24	32.97E	5.30	0.59a)	0	15.24	32.97	5.30	0.59	24.38	356.3	0.000
10	15.31	32.92	5.58	0.50	10	15.31	32.92	5.58	0.50	24.32	361.7	0.036
24	15.26	32.95	5.39	0.51	20	15.29	32.95	5.40	0.50	24.35	359.2	0.072
52	12.86	32.92	5.74	0.81	30	15.24	32.95	5.44	0.56	24.36	358.6	0.108
74	10.55	32.83	5.39	0.96	50	13.25	32.93	5.74	0.79	24.76	320.8	0.176
102	9.74	-	4.63	1.13	75	10.50	32.83	5.34	0.97	25.20	279.8	0.251
150	8.84	33.44	4.18	1.83	100	9.77	32.87	4.68	1.13	25.35	265.5	0.319
196	8.28	33.78	3.14	2.11	150	8.84	33.44	4.18	1.83	25.94	210.0	0.438
287	7.09	34.00	2.32	2.28	200	8.24	33.80	3.11	2.11	26.32	175.1	0.534
382	6.03	34.09	1.28	2.69	250	7.64	33.93	2.67	2.23	26.51	157.5	0.617
473	5.60	34.13	0.77	2.97	300	6.90	34.01	2.15	2.32	26.67	142.2	0.693
565	5.00	34.23	0.47	3.15	400	5.94	34.10	1.15	2.75	26.87	124.3	0.825
748	4.52	34.40	0.37	2.95r	500	5.41	34.15	0.65	3.04	26.97	115.3	0.945
936	3.98	34.43	0.59	3.19	600	4.91	34.27	0.48	(3.16)	27.13	101.2	1.054
1128	3.54	34.43	0.73	2.98	700	4.66	34.36	0.37	(3.18)	27.23	92.4	1.150
					800	4.35	34.42	0.40	(3.19)	27.31	85.3	1.239
					1000	3.83	34.43	0.65	3.14	27.37	80.3	1.405

70.110 BLACK DOUGLAS; July 11, 1950; 2243 GCT; 34°13'N, 125°54'W; sounding, 2,240 fm; wind, 360°, force 5; weather, cloudy; sea, very rough; wire angle, 21°.

0	16.31	33.04E	4.77	0.48	0	16.31	33.04	4.77	0.48	24.19	373.7	0.000
10	16.31	33.01	4.82	0.44	10	16.31	33.01	4.82	0.44	24.17	376.2	0.037
24	15.76	33.04	5.03	0.50	20	15.99	33.04	4.91	0.48	24.26	367.5	0.075
52	14.64	32.97	5.55	0.52	30	15.50	33.04	5.27	0.51	24.38	357.3	0.111
74	13.06	32.97	5.54	0.60	50	14.74	32.97	5.55	0.52	24.49	347.3	0.181
101	11.75	32.97	4.73	0.76	75	12.95	32.97	5.54	0.60	24.85	312.7	0.264
150	9.78	33.33	4.42	1.38	100	11.75	32.97	4.74	0.76	25.08	291.3	0.339
198	8.60	33.82	2.86	1.91	150	9.78	33.33	4.42	1.38	25.71	229.7	0.469
295	7.76	34.13	1.40	2.48	200	8.57	33.83	2.82	1.92	26.29	177.6	0.572
398	7.20	34.25	0.82	2.78	250	8.09	34.05	1.91	2.25	26.54	155.2	0.655
497	6.34	34.25	0.59	2.88	300	7.74	34.14	1.35	2.50	26.66	144.3	0.729
598	5.78	34.29	0.39	2.93	400	7.19	34.25	0.80	2.78	26.82	129.7	0.866
798	4.73	34.38	0.33	3.09	500	6.33	34.25	0.59	2.88	26.94	119.8	0.991
1003	4.00	34.45	0.60	3.10	600	5.76	34.29	0.39	2.93	27.04	110.4	1.106
1204	3.44	34.49	0.71	2.99	700	5.15	34.34	0.35	3.02	27.16	100.0	1.211
					800	4.72	34.38	0.33	3.09	27.24	92.7	1.308
					1000	4.00	34.45	0.60	3.10	27.37	80.8	1.481

a) Many double values; the smoothest property distribution was obtained from the values listed.

E Evaporation (see page 204).

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

BLACK DOUGLAS; July 12, 1950; 0514 GCT; 33°53'N, 126°35.5'W; sounding, 2,560 fm; wind, 360°, force 4; weather, cloudy; sea, very rough; wire angle, 0°. 70.120

0	16.81	33.12E	4.86	0.54	0	16.81	33.12	4.86	0.54	24.14	379.1	0.000
10	16.85	33.13	5.43	0.52	10	16.85	33.13	5.43	0.52	24.14	379.4	0.038
25	16.82	33.12	5.54	0.60	20	16.84	33.12	5.44	0.57	24.13	380.4	0.076
55	14.04	33.19	6.11	0.51	30	16.81	33.12	5.80	0.60	24.14	380.0	0.114
80	11.80	33.30	5.84	0.84	50	15.50	33.17	6.11	0.52	24.47	348.4	0.187
110	10.10	33.26	4.90	1.23	75	12.10	33.29	5.94	0.75	25.26	273.7	0.264
165	8.85	33.75	2.05	2.00	100	10.60	33.27	5.35	1.11	25.52	249.4	0.330
220	8.13	34.00	2.57r	2.22	150	9.10	33.52	2.57	1.90	25.97	207.7	0.447
328	6.80	34.04	0.98	2.61	200	8.36	33.94	(1.54)	2.15	26.41	166.3	0.538
439	5.87	34.11	1.09	2.88	250	7.72	34.02	(1.19)	2.33	26.57	152.0	0.617
545	4.84	34.18	0.87	3.01	300	7.11	34.04	(1.01)	2.51	26.67	142.8	0.691
651	4.46	34.23	0.60	3.05	400	6.15	34.08	1.02	2.81	26.83	128.3	0.826
860	3.89	34.38	0.56	3.04	500	5.29	34.15	1.05	2.96	26.99	113.5	0.947
1071	3.46	34.49	0.65	3.01	600	4.65	34.21	0.70	3.04	26.11	102.5	1.056
1275	3.04	34.49	1.04	2.89	700	4.32	34.26	0.56	3.05	27.19	95.8	1.154
					800	4.03	34.33	0.56	3.05	27.27	82.2	1.244
					1000	3.64	34.46	0.60	3.03	27.42	75.9	1.402

BLACK DOUGLAS; July 12, 1950; 1121 GCT; 33°33'N, 127°16.5'W; sounding, 2,440 fm; wind, 360°, force 4; weather, overcast; sea, rough; wire angle, 13°. 70.130

0	16.61	33.17E	3.55	0.64	0	16.61	33.17	3.55	0.64	24.22	370.8	0.000
10	16.62	33.13	4.24	0.59	10	16.62	33.13	4.24	0.59	24.19	374.0	0.037
24	16.62	33.13	5.03	0.74	20	16.60	33.13	4.95	0.66	24.19	374.3	0.075
48	14.36	33.06	5.15	0.64	30	16.60	33.13	5.08	0.73	24.19	374.6	0.112
73	13.04	33.03	5.30	0.61	50	14.20	33.05	5.16	0.64	24.66	330.7	0.182
96	11.24	32.88	5.18	0.86	75	12.88	33.03	5.30	0.61	24.91	307.0	0.262
147	8.44	33.04	5.12	1.54	100	11.15	32.88	5.17	1.01	25.12	287.6	0.337
192	8.14	33.69	3.97	1.72	150	8.40	33.06	5.10	1.56	25.76	231.4	0.466
278	7.11	33.98	3.38	2.02	200	8.05	33.75	3.86	1.75	26.31	176.0	0.569
370	6.02	34.05	1.91	2.74	250	7.47	33.93	3.51	1.88	26.54	155.0	0.651
457	5.20	34.04	1.24	2.96	300	6.84	34.01	3.18	2.21	26.68	141.5	0.725
551	4.80	34.13	0.79	3.09	400	5.65	34.05	1.63	2.82	26.87	124.3	0.858
738	4.34	34.33	0.36	3.20	500	4.98	34.07	1.04	3.03	26.96	115.8	0.978
925	3.82	34.43	0.55	3.21	600	4.65	34.19	0.61	3.13	27.10	104.0	1.088
1122	3.32	34.34r	0.79	3.09	700	4.43	34.30	0.40	3.18	27.21	94.1	1.187
					800	4.17	34.38	0.40	3.21	27.30	86.1	1.277
					1000	3.61	(34.44)	0.65	3.18	(27.40)	(77.0)	(1.441)

CREST; July 8, 1950; 1904 GCT; 35°35.5'N, 121°20'W; sounding, 160 fm; wind, 320°, force 2; weather, overcast; sea, moderate; wire angle, 12°. 73.51

0	15.28	33.31	5.95	0.25	0	15.28	33.31	5.95	0.25	24.63	332.3	0.000
14	13.03	33.37	5.93	0.76	10	14.25	33.35	5.93	0.56	24.88	308.6	0.032
38	10.49	33.55	4.88	1.41	20	12.00	33.40	5.86	0.96	25.37	262.4	0.060
63	9.37	33.69	3.81	1.95	30	10.98	33.47	5.35	1.21	25.61	239.7	0.086
88	9.09	33.75	3.11	2.11	50	9.62	33.63	4.30	1.66	25.97	206.0	0.130
125	8.50	34.05	2.41	2.13	75	9.24	33.72	3.45	2.04	26.10	194.0	0.180
143	8.48	34.00	2.18	2.23	100	8.90	33.80	2.85	2.12	26.21	183.2	0.227
193	8.22	34.16	1.72	2.23	150	8.44	34.00	2.12	2.23	26.44	162.4	0.314
243	7.79	34.22	1.53	2.36	200	8.16	34.17	1.67	2.23	26.62	146.5	0.391
					250	(7.74)	(34.23)	(1.51)	(2.38)	(26.73)	(136.8)	(0.461)

E Evaporation (see page 204).

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
73.61	CREST; July 8, 1950; 2340 GCT; 35°15.5'N, 122°03'W; sounding, 1,550 fm; wind, 330°, force 3; weather, cloudy; sea, moderate; wire angle, 15°.											
0	15.26	33.03	5.34	0.69	0	15.26	33.03	5.34	0.69	24.42	352.6	0.000
10	14.55	33.03	5.46	0.70	10	14.55	33.03	5.46	0.70	24.57	338.1	0.034
24	14.58	33.22	5.41	0.76	20	14.57	33.16	5.44	0.74	24.67	329.2	0.068
48	11.69	33.37	5.27	1.38	30	14.00	33.26	5.38	0.84	24.86	310.8	0.100
72	10.46	33.52	4.85	1.88	50	11.52	33.39	5.26	1.23	25.45	255.3	0.156
95	10.12	33.57	4.29	2.02	75	10.40	33.53	4.78	1.90	25.76	226.6	0.217
140	8.93	33.93	2.63	2.36	100	10.03	33.58	4.13	2.05	25.86	217.3	0.272
186	8.46	34.00	2.00	2.61	150	8.78	33.95	2.39	2.22	26.35	171.1	0.369
270	7.34	34.13	1.79	2.85	200	8.35	34.02	1.96	2.66	26.47	160.3	0.453
361	6.35	34.11	1.36	3.26	250	7.67	34.11	1.83	2.80	26.65	144.6	0.529
449	5.68	34.22	0.82	3.27	300	6.98	34.12	1.67	3.01	26.75	135.1	0.598
542	5.31	34.33	0.53	3.47	400	6.02	34.14	1.10	3.26	26.89	122.3	0.727
729	4.82	34.45	0.48	3.47	500	5.44	34.29	0.62	3.40	27.08	105.3	0.841
918	4.26	34.51	0.80	3.47	600	4.13	34.37	0.48	3.47	27.18	96.5	0.941
1117	3.65	34.51	0.73	3.40	700	4.88	34.43	0.48	3.47	27.26	90.0	1.034
					800	4.62	34.48	0.59	3.47	27.33	84.2	1.122
					1000	3.98	34.51	0.77	3.46	27.42	76.3	1.283
77.55	CREST; July 9, 1950; 0940 GCT; 34°54'N, 121°13'W; sounding, 313 fm; wind, 290°, force 2; weather, overcast; sea, moderate; wire angle, 0°.											
0	15.38	33.32	5.98	0.79	0	15.38	33.32	5.98	0.79	24.61	333.7	0.000
10	14.62	33.26	5.97	0.87	10	14.62	33.26	5.97	0.87	24.73	322.8	0.033
25	13.95	33.24	6.08	0.97	20	14.15	33.25	6.07	0.94	24.82	314.2	0.065
50	11.14	33.27	5.54	1.45	30	13.69	33.24	6.06	1.01	24.91	306.2	0.096
75	10.04	33.60	4.19	1.89	50	11.14	33.27	5.54	1.45	25.42	257.7	0.152
99	9.46	33.72	3.23	2.19	75	10.04	33.60	4.19	1.89	25.87	215.4	0.211
153	8.63	33.96	2.98	2.48	100	9.43	33.72	3.23	2.19	26.07	197.5	0.263
202	7.86	34.00	2.57	2.69	150	8.66	33.96	2.99	2.46	26.38	168.5	0.354
251	7.62	34.14	1.34	3.09	200	7.87	34.00	2.57	2.68	26.53	154.7	0.435
300	6.94	34.14	1.28	3.29	250	7.63	34.14	1.34	3.08	26.67	142.0	0.509
354	6.52	34.15	1.11	3.29	300	6.94	34.14	1.28	3.29	26.77	133.2	0.578
403	6.06	34.15	0.88	3.34	400	6.06	34.15	0.89	3.34	26.90	121.9	0.705
453	6.22	34.22	0.60	3.39	500	5.74	34.20	0.63	3.37	26.97	115.6	0.824
502	5.68	34.20	0.63	3.37								
77.65	CREST; July 9, 1950; 0438 GCT; 34°34'N, 121°55'W; sounding, 2,070 fm; wind, 320°, force 3; weather, overcast; sea, moderate; wire angle, 19°.											
0	15.00	33.24	5.03	0.70	0	15.00	33.24	5.03	0.70	24.64	331.6	0.000
10	14.64	33.21	5.30	0.71	10	14.64	33.21	5.30	0.71	24.69	326.4	0.033
24	14.13	33.21	5.47	0.76	20	14.25	33.21	5.45	0.74	24.77	319.0	0.065
52	10.96	33.37	4.70	1.43	30	13.88	33.22	5.45	0.82	24.86	311.4	0.097
75	9.90	33.58	3.70	1.90	50	11.95	33.36	4.80	1.42	25.35	265.1	0.154
104	9.44	33.79	2.87	2.34	75	9.90	33.58	3.70	1.90	25.88	214.3	0.214
156	8.63	33.99	1.77	2.42	100	9.48	33.76	2.98	2.32	26.09	195.1	0.265
207	8.35	34.07	1.51	2.89	150	8.72	33.98	1.83	2.42	26.39	168.0	0.356
309	7.60	34.16	1.05	3.10	200	8.38	34.06	1.53	2.86	26.50	157.7	0.437
416	7.08	34.18	0.78	3.29	250	8.08	34.11	1.33	3.01	26.58	150.7	0.515
519	6.30	34.20	0.54	3.41	300	7.68	34.15	1.10	3.08	26.67	142.6	0.588
623	5.57	34.27	0.35	3.40	400	7.14	34.18	0.81	3.26	26.78	134.3	0.726
830	4.48	34.34	0.39	3.44	500	6.50	34.20	0.59	3.41	26.88	125.4	0.856
1042	3.83	34.48	0.57	3.44	600	5.71	34.25	0.38	3.40	27.02	112.9	0.976
1246	3.35	34.46	0.84	3.39a)	700	5.10	34.31	0.35	3.42	27.14	101.6	1.083
					800	4.60	34.33	0.38	3.44	27.21	94.9	1.181
					1000	3.93	34.46	0.53	3.44	27.39	79.3	1.355

a) Alternate value, 3.13 μg at/L, not used in interpolation.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
CREST; July 9, 1950; 1441 GCT; 34°18.5'N, 120°52'W; sounding, 475 fm; wind, calm; weather, rain; sea, moderate; wire angle, 8°.													80.55
0	14.63	33.71	6.18	0.57	0	14.63	33.71	6.18	0.57	25.08	289.6	0.000	
10	13.27	33.77	6.04	0.84	10	13.27	33.77	6.04	0.84	25.41	258.5	0.027	
20	10.10	33.78	3.37	1.97	20	10.10	33.78	3.37	1.97	26.00	201.9	0.050	
49	9.61	33.85	2.93	2.10	30	9.86	33.79	3.17	2.03	26.05	197.6	0.070	
74	9.17	33.87	2.35	2.31	50	9.61	33.85	2.93	2.10	26.14	189.5	0.109	
99	8.94	33.95	1.95	2.41	75	9.16	33.87	2.33	2.32	26.23	181.3	0.155	
152	8.55	34.04	1.56	2.51	100	8.93	33.96	1.93	2.41	26.34	171.8	0.200	
199	8.36	34.07	1.60	2.76	150	8.57	34.04	1.57	2.51	26.46	161.3	0.282	
244	8.19	34.09	1.45	2.86	200	8.34	34.07	1.59	2.76	26.51	156.5	0.382	
289	8.06	34.18	1.30	2.86	250	8.17	34.10	1.42	2.86	26.56	152.6	0.439	
339	7.60	34.14	1.11	2.95	300	7.99	34.18	1.25	2.87	26.65	144.8	0.514	
386	7.19	34.22	0.91	3.16	400	7.08	34.22	0.85	3.22	26.82	130.4	0.652	
480	6.52	34.22	0.65	3.34	500	6.35	34.23	0.62	3.34	26.92	121.3	0.778	
582	5.77	34.29	0.54	3.34	600	5.67	34.29	0.53	3.34	27.05	109.3	0.893	
681	5.35	34.29	0.48	3.30	700	(5.27)	(34.29)			(27.10)	(105.2)	(1.000)	
CREST; July 9, 1950; 1742 GCT; 34°08.5'N, 121°10'W; sounding, 1,470 fm; wind, 090°, force 1; weather, squally; sea, moderate; wire angle, 0°.													80.60
0	15.35	33.26	5.57	0.84	0	15.35	33.26	5.57	0.84	24.58	337.4	0.000	
10	14.00	33.33	6.10	0.84	10	14.00	33.33	6.10	0.84	24.92	305.1	0.032	
20	12.78	33.33	5.77	1.04	20	12.78	33.33	5.77	1.04	25.16	281.9	0.061	
50	11.49	33.51	5.22	1.30	30	12.25	33.35	5.59	1.19	25.28	270.8	0.089	
75	10.03	33.55	4.32	1.71	50	11.49	33.51	5.22	1.30	25.55	246.0	0.141	
100	9.73	33.76	3.72	1.98	75	10.03	33.55	4.32	1.71	25.83	219.1	0.199	
154	8.81	33.96	2.27	2.46	100	9.73	33.76	3.72	1.98	26.05	199.4	0.251	
203	8.16	34.07	1.65	2.83	150	8.87	33.95	2.32	2.43	26.34	162.4	0.342	
299	7.00	34.17	1.16	3.13	200	8.19	34.06	1.68	2.82	26.53	155.0	0.420	
401	6.40	34.25	0.65	3.31	250	7.55	34.13	1.34	3.01	26.68	141.4	0.495	
498	5.92	34.25	0.54	3.28	300	7.00	34.17	1.15	3.13	26.79	131.7	0.563	
600	5.08	34.27	0.45	3.33	400	6.40	34.25	0.65	3.31	26.93	119.0	0.688	
802	4.56	34.45	0.35	3.33	500	5.90	34.25	0.55	3.28	27.00	113.7	0.805	
1000	4.02	34.49	0.56	3.18	600	5.08	34.27	0.45	3.33	27.11	103.4	0.914	
1204	3.49	34.52	0.76	3.18	700	4.82	34.34	0.37	3.33	27.19	96.0	1.013	
					800	4.57	34.45	0.35	3.33	27.31	85.6	1.105	
					1000	4.02	34.49	0.57	3.18	27.40	78.2	1.268	
CREST; July 9, 1950; 2324 GCT; 33°47'N, 121°52.5'W; sounding, 1,950 fm; wind, 360°, force 2; weather, partly cloudy; sea, slight; wire angle, 10°.													80.70
0	15.97	33.37	5.38	0.57	0	15.97	33.37	5.38	0.57	24.52	342.8	0.000	
10	15.45	33.39	5.66	0.46	10	15.45	33.39	5.66	0.46	24.65	330.2	0.034	
20	13.98	33.54	5.98	0.83	20	13.98	33.54	5.98	0.83	25.08	290.0	0.065	
49	10.34	33.77	3.78	2.07	30	11.65	33.65	5.92	1.18	25.63	238.1	0.091	
74	8.83	33.85	2.69	2.43	50	10.20	33.77	3.78	2.13	25.98	204.8	0.135	
98	8.53	33.89	2.25	2.45	75	8.82	33.85	2.68	2.44	26.27	177.8	0.183	
152	7.90	34.02	2.38	2.52	100	8.51	33.89	2.26	2.45	26.35	170.8	0.227	
201	7.40	34.07	1.93	2.87	150	7.94	34.01	2.38	2.52	26.53	154.2	0.308	
298	6.39	34.09	1.39	3.16	200	7.42	34.07	1.94	2.84	26.65	143.0	0.382	
400	5.65	34.16	0.88	3.60	250	6.88	34.08	1.59	3.04	26.73	136.0	0.452	
497	5.08	34.27	0.53	3.64	300	6.38	34.09	1.38	3.17	26.81	129.3	0.519	
599	5.06	34.35	0.32	3.68	400	5.65	34.16	0.88	3.60	26.95	116.1	0.641	
801	4.30	34.47	0.49	3.68	500	5.09	34.27	0.52	3.64	27.11	102.2	0.750	
999	3.74	34.51	0.73	3.69	600	5.06	34.35	0.32	3.68	27.18	97.1	0.850	
1204	3.30	34.52	0.87	3.48	700	4.75	34.41	0.36	3.68	27.26	89.8	0.943	
					800	4.31	34.47	0.49	3.68	27.35	81.2	1.029	
					1000	3.74	34.51	0.73	3.69	27.45	73.3	1.184	

SIO

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

80.80 CREST; July 10, 1950; 0405 GCT; 33°29.5'N, 122°32.5'W; sounding, 2,150 fm; wind, 350°, force 3; weather, overcast; sea, moderate; wire angle, 15°.

0	15.47	32.75	5.48	0.55	0	15.47	32.75	5.48	0.55	24.16	377.4	0.000
10	15.31	33.03	5.55	0.53	10	15.31	33.03	5.55	0.53	24.41	353.4	0.036
29	15.37	33.04	5.78	0.55	20	15.34	33.04	5.70	0.54	24.41	353.8	0.072
48	14.55	33.04	5.47	0.56	30	15.37	33.04	5.79	0.55	24.40	354.8	0.107
72	12.80	33.03	5.67	0.67	50	14.52	33.04	5.48	0.56	24.59	337.5	0.176
96	11.18	33.04	5.41	0.95	75	12.50	33.03	5.67	0.70	24.99	299.9	0.256
147	8.85	33.69	4.00	1.79	100	10.99	33.05	5.31	1.00	25.28	272.1	0.328
193	8.23	33.87	3.63	2.08	150	8.80	33.71	3.95	1.83	26.16	189.1	0.444
284	7.02	34.03	2.28	2.68	200	8.13	33.88	3.57	2.12	26.40	167.5	0.532
381	6.37	34.16	1.17	3.30	250	7.46	33.98	2.92	2.44	26.57	151.3	0.612
473	5.81	34.25	0.61	3.49	300	6.87	34.06	2.06	2.80	26.72	138.1	0.685
570	5.09	34.27	0.61	3.54	400	6.27	34.18	0.98	3.34	26.89	122.5	0.814
765	4.38	34.43	0.48	3.54	500	5.58	34.26	0.60	3.52	27.04	109.1	0.930
959	3.94	34.52	0.53	3.54	600	4.92	34.28	0.60	3.54	27.14	100.7	1.035
1162	3.53	34.54	0.81	3.39a)	700	4.54	34.36	0.52	3.54	27.24	91.2	1.131
					800	4.28	34.46	0.49	3.54	27.35	81.5	1.218
					1000	3.85	34.53	0.57	3.54	27.45	73.1	1.372

80.90 CREST; July 10, 1950; 0930 GCT; 33°10'N, 123°13.5'W; sounding, 2,250 fm; wind, 360°, force 2; weather, overcast; sea, moderate; wire angle, 5°.

0	16.10	33.08	5.47	0.49	0	16.10	33.08	5.47	0.49	24.27	366.5	0.000
10	16.00	33.17	5.33	0.56	10	16.00	33.17	5.33	0.56	24.36	358.1	0.036
20	15.92	33.17	5.81	0.56	20	15.92	33.17	5.81	0.56	24.38	356.6	0.072
50	13.74	33.19	5.62	0.57	30	15.90	33.17	5.80	0.56	24.39	356.3	0.108
74	11.67	33.01	5.70	0.84	50	13.74	33.19	5.62	0.57	24.86	311.2	0.174
99	10.64	33.20	5.17	1.13	75	11.66	33.01	5.70	0.87	25.13	286.2	0.249
151	8.85	33.62	3.45	2.02	100	10.60	33.21	5.11	1.14	25.47	253.9	0.316
198	8.08	33.91	2.69	2.32	150	8.87	33.62	3.48	1.98	26.08	197.0	0.430
291	6.82	34.04	2.18	2.62	200	8.03	33.91	2.42	2.33	26.43	163.8	0.519
388	5.87	34.13	1.17	3.04	250	7.33	33.98	2.37	2.51	26.59	149.4	0.597
482	5.44	34.20	0.66	3.44	300	6.73	34.05	2.12	2.65	26.73	136.9	0.669
582	5.00	34.28	0.43	3.45	400	5.81	34.14	1.06	3.11	26.92	119.7	0.798
780	4.28	34.43	0.47	3.44	500	5.37	34.21	0.61	3.44	27.03	110.3	0.913
975	3.79	34.52	0.58	3.52	600	4.91	34.29	0.44	3.45	27.15	99.7	1.018
1176	3.33	34.52	0.91	3.39	700	4.52	34.37	0.45	3.45	27.25	90.0	1.118
					800	4.22	34.44	0.48	3.44	27.34	82.4	1.200
					1000	3.74	34.52	0.63	3.52	27.45	72.5	1.353

80.100 CREST; July 10, 1950; 1434 GCT; 32°49.5'N, 123°54.5'W; sounding, 2,250 fm; wind, 360°, force 4; weather, overcast; sea, rough; wire angle, 21°.

0	16.17	33.19	5.44	0.60	0	16.17	33.19	5.44	0.60	24.34	360.2	0.000
9	16.09	33.21	5.44	0.58	10	16.09	33.21	5.44	0.58	24.37	357.1	0.036
23	16.14	33.15	5.44	0.64	20	16.13	33.18	5.45	0.63	24.34	360.7	0.072
46	14.03	33.91	5.87	0.65	30	16.14	33.10	5.47	0.64	24.28	366.8	0.108
70	12.41	33.21	5.82	0.83	50	13.63	33.91	5.87	0.66	24.75	322.2	0.177
144	8.84	33.69	3.47	2.21	75	12.23	33.25	5.77	0.93	25.20	279.6	0.252
190	8.20	33.98	1.80	2.62	100	10.15	33.33	4.86	1.45	25.65	237.5	0.317
282	7.15	34.09	1.74	2.93	150	8.74	33.75	3.23	2.30	26.20	185.3	0.423
380	6.36	34.13	0.94	3.38	200	8.05	34.00	1.77	2.67	26.50	157.4	0.508
473	5.36	34.18	0.76	3.39	250	7.48	34.06	1.74	2.84	26.63	145.6	0.584
572	4.86	34.27	0.58	3.24u	300	6.98	34.10	1.67	3.02	26.73	136.6	0.655
767	4.20	34.45	0.54	3.28	400	6.19	34.14	0.86	3.38	26.87	124.4	0.785
961	3.66	34.54	0.61	3.24	500	5.18	34.20	0.72	(3.39)	27.04	108.6	0.902
1162	3.22	34.54	0.81	3.22	600	4.73	34.30	0.57	(3.37)	27.17	96.8	1.004
					700	4.38	34.39	0.54	(3.32)	27.28	87.0	1.096
					800	4.09	34.47	0.56	3.27	27.38	78.4	1.179
					1000	3.57	34.54	0.64	3.24	27.49	69.0	1.326

a) Alternate value, 3.42 μg at/L, not used in interpolation.

CREST; July 10, 1950; 1938 GCT; 32°30'N, 124°35.5'W; sounding, 2,400 fm; wind, 360°, force 4; weather, overcast; sea, moderate; wire angle, 22°. 80.110

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
0	16.07	33.10	5.45	0.58	0	16.07	33.10	5.45	0.58	24.29	364.4	0.000
9	15.99	33.10	5.47	0.54	10	15.98	33.10	5.47	0.54	24.31	362.9	0.036
28	15.60	33.03	5.53	0.69	20	15.64	33.04	5.49	0.68	24.35	360.0	0.072
46	14.43	33.03	5.59	0.65	30	15.58	33.03	5.53	0.69	24.35	359.9	0.108
69	11.97	33.03	5.88	0.90	50	13.25	33.03	5.63	0.67	24.84	313.4	0.176
92	10.96	33.13	5.54	1.18	75	11.75	33.04	5.85	0.98	25.14	285.6	0.251
142	9.04	33.50	4.26	1.85	100	10.67	33.19	5.35	1.29	25.45	256.5	0.318
186	8.48	33.89	3.10	2.26	150	8.93	33.56	3.99	1.94	26.02	202.3	0.434
274	7.52	34.13	2.16	2.71	200	8.34	33.98	2.88	2.35	26.44	163.1	0.525
366	6.42	34.11	1.27	3.24	250	7.80	34.11	2.33	2.61	26.63	146.5	0.602
456	5.37	34.14	1.01	3.39	300	7.20	34.13	1.95	2.87	26.73	137.3	0.673
551	4.80	34.25	0.60	3.67	400	6.00	34.12	1.11	3.33	26.88	123.5	0.802
741	4.30	34.42	0.37	3.75	500	5.05	34.18	0.87	3.49	27.04	108.4	0.919
931	3.72	34.45	0.57	3.69	600	4.63	34.30	0.48	3.72	26.18	95.8	1.021
1131	3.32	34.51	0.88	3.64 a)	700	4.37	34.39	0.37	3.75	27.29	86.7	1.112
					800	4.13	34.44	0.40	3.74	27.35	81.4	1.196
					1000	3.54	34.47	0.69	3.66	27.43	74.1	1.352

CREST; July 11, 1950; 0042 GCT; 32°11.5'N, 125°16'W; sounding, 2,350 fm; wind, 360°, force 4; weather, overcast; sea, rough; wire angle, 25°. 80.120

0	16.35	33.12	5.41	0.66	0	16.35	33.12	5.41	0.66	24.24	369.0	0.000
9	16.24	33.13	5.58	0.61	10	16.24	33.13	5.60	0.61	24.28	365.7	0.037
22	16.23	33.13	5.60	0.65	20	16.23	33.13	5.60	0.65	24.28	366.2	0.073
45	14.81	33.13	5.89	0.64	30	16.22	33.13	5.69	0.64	24.28	366.5	0.110
68	14.37	33.17	5.87	0.66	50	14.73	33.13	5.90	0.64	24.61	335.3	0.180
90	12.50	33.04	5.98	0.72	75	13.90	33.16	5.92	0.67	24.81	317.1	0.262
140	9.75	33.12	5.36	1.33	100	11.91	33.04	5.98	0.78	25.11	288.9	0.337
184	9.17	33.58	4.46	1.63	150	9.57	33.16	5.16	1.42	25.61	241.8	0.470
273	7.58	34.05	2.81	2.57	200	8.95	33.70	4.15	1.74	26.13	193.1	0.579
366	6.61	34.18	1.52	3.10	250	8.00	33.96	3.20	2.26	26.48	160.4	0.667
455	5.71	34.18	0.99	3.49	300	7.22	34.12	2.36	2.79	26.72	138.3	0.741
549	5.13	34.22	0.66	3.52	400	6.25	34.18	1.27	3.29	26.90	122.3	0.872
736	4.54	34.38	0.39	3.53	500	5.39	34.19	0.83	3.52	27.01	112.0	0.989
925	3.88	34.52	0.59	3.50	600	4.93	34.26	0.57	3.53	27.12	102.3	1.096
1125	3.42	34.57	0.82	3.34	700	4.63	34.34	0.41	3.53	27.21	93.7	1.194
					800	4.33	34.43	0.42	3.53	27.32	86.4	1.284
					1000	3.67	34.55	0.72	3.46	27.49	69.4	1.440

CREST; July 11, 1950; 0634 GCT; 31°49'N, 125°56'W; sounding, 2,250 fm; wind, 360°, force 4; weather, overcast; sea, rough; wire angle, 19°. 80.130

0	17.49	33.64	5.27	0.49	0	17.49	33.64	5.27	0.49	24.37	356.6	0.000
9	17.42	33.66	5.35	0.56	10	17.42	33.66	5.35	0.56	24.41	353.7	0.036
23	17.49	33.58	5.33	0.55	20	17.47	33.59	5.34	0.55	24.34	360.4	0.071
47	17.06	33.71	5.35	0.52	30	17.48	33.59	5.34	0.54	24.34	361.0	0.107
70	16.74	33.82	5.61	0.46	50	17.05	33.73	5.35	0.52	24.55	341.5	0.178
94	16.04	33.89	5.53	0.46	75	16.67	33.84	5.61	0.46	24.72	325.6	0.261
145	12.56	33.57	5.19	0.81	100	15.50	33.89	5.47	0.47	25.03	297.0	0.339
192	9.91	33.68	4.61	1.50	150	12.22	33.57	5.14	0.88	25.46	256.8	0.477
284	7.78	34.04	3.59	2.34	200	9.60	33.72	4.52	1.61	26.04	201.7	0.592
381	6.54	34.07	2.41	2.87	250	8.27	33.96	3.94	2.08	26.44	164.4	0.684
474	5.50	34.07	1.46	3.20	300	7.57	34.05	3.38	2.45	26.61	148.4	0.761
572	4.99	34.23	0.78	3.50	400	6.33	34.07	2.24	2.95	26.80	131.6	0.901
768	4.28	34.31	0.36	3.63	500	5.34	34.09	1.27	3.28	26.94	118.7	1.027
964	3.78	34.49	0.58	3.63	600	4.86	34.26	0.68	3.54	27.13	101.4	1.137
1168	3.34	34.54	0.87	3.42	700	4.49	34.29	0.44	3.62	27.19	95.6	1.235
					800	4.19	34.33	0.38	3.63	27.26	90.0	1.328
					1000	3.69	34.51	0.67	3.61	27.45	72.6	1.490

a) Alternate value, 3.33 μg at/L, not used in interpolation.

SIO

CCOFI
5007

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

83.55 CREST; July 16, 1950; 1243 GCT; 33°45'N, 120°24.5'W; sounding, 560 fm; wind, 270°, force 1; weather, overcast; sea, moderate; wire angle, 0°.

0	14.88	33.68	5.69	0.66	0	14.88	33.68	5.69	0.66	25.00	297.0	0.000
10	14.46	33.68	5.74	0.71	10	14.46	33.68	5.74	0.71	25.09	288.9	0.029
25	13.51	33.68	5.52	0.97	20	13.80	33.68	5.65	0.84	25.23	275.8	0.058
50	10.22	33.80	3.76	2.03	30	13.10	33.69	5.05	1.12	25.38	261.8	0.084
74	9.08	33.93	2.78	2.14	50	10.22	33.80	3.76	2.03	26.00	203.1	0.131
99	8.84	34.04	2.57	2.40	75	9.07	33.94	2.77	2.15	26.30	174.8	0.178
153	8.40	34.18	1.78	2.47	100	8.82	34.05	2.57	2.40	26.42	163.4	0.220
202	8.28	34.18	1.38	2.70	150	8.42	34.18	1.83	2.47	26.59	148.6	0.298
300	7.50	34.27	1.15	3.21	200	8.29	34.18	1.39	2.69	26.61	147.6	0.373
403	6.92	34.31	1.07	3.25	250	7.92	34.21	1.22	3.02	26.69	140.9	0.444
501	6.28	34.31	0.69	3.43	300	7.50	34.27	1.15	3.21	26.80	131.1	0.513
603	5.76	34.40	0.44	3.41	400	6.93	34.31	1.07	3.25	26.91	121.9	0.639
702	5.34	34.37	0.53	3.44	500	6.29	34.31	0.69	3.43	26.99	114.3	0.757
805	4.68	34.42	0.38	3.38	600	5.77	34.40	0.45	3.41	27.13	102.5	0.866
904	4.27	34.54	0.42	3.33	700	5.36	34.37	0.53	3.44	27.16	100.5	0.967
					800	4.72	34.42	0.40	3.39	27.27	89.8	1.062
					1000	(4.01)	(34.56)			(27.46	(72.9)	(1.225)

83.60 CREST; July 16, 1950; 0934 GCT; 33°38'N, 120°40'W; sounding, 500 fm; wind, 280°, force 2; weather, overcast; sea, moderate; wire angle, 10°.

0	15.25	33.80	5.40	0.66	0	15.25	33.80	5.40	0.66	25.01	295.7	0.000
10	14.83	33.77	5.38	0.77	10	14.83	33.77	5.38	0.77	25.08	289.5	0.029
25	14.15	33.69	4.94	0.89	20	14.37	33.70	5.15	0.84	25.12	285.7	0.058
49	10.56	33.84	3.35	1.83	30	13.82	33.70	4.70	0.97	25.24	275.0	0.086
73	9.41	33.89	2.60	2.14	50	10.45	33.84	3.32	1.83	25.99	203.8	0.134
96	8.96	33.98	2.30	2.47	75	9.34	33.89	2.58	2.18	26.22	182.8	0.182
145	8.52	34.14	1.83	2.69	100	8.90	34.00	2.25	2.51	26.37	168.4	0.226
188	8.06	34.22	1.67	3.02	150	8.49	34.15	1.80	2.71	26.55	151.9	0.306
230	7.64	34.22	1.01	3.19	200	7.89	34.22	1.56	3.09	26.70	138.7	0.379
273	7.42	34.27	0.80	3.30	250	7.53	34.23	0.89	3.24	26.76	133.9	0.447
364	6.74	34.31	0.52	3.38	300	7.23	34.29	0.70	3.34	26.85	125.9	0.512
453	6.18	34.31	0.35	3.55	400	6.49	34.31	0.42	3.42	26.97	115.6	0.633
549	5.76	34.38	0.38	3.56	500	5.98	33.33	0.37	3.56	27.05	108.9	0.745
643	5.23	34.40	0.38	3.54	600	5.48	34.40	0.40	3.56	27.17	98.7	0.849
747	4.86	34.49	0.45	3.44	700	4.99	34.44	0.42	3.48	27.26	90.5	0.943

83.70 CREST; July 16, 1950; 0424 GCT; 33°17.5'N, 121°21.5'W; sounding, 2,000 fm; wind, 270°, force 2; weather, overcast; sea, rough; wire angle, 9°.

0	14.38	33.36	5.64	0.76	0	14.38	33.36	5.64	0.76	24.86	310.4	0.000
10	13.99	33.36	5.79	0.83	10	13.99	33.36	5.79	0.83	24.94	302.7	0.031
29	13.02	33.28	5.67	0.88	20	13.55	33.34	5.75	0.86	25.02	295.8	0.060
49	10.73	32.99	5.53	1.12	30	12.85	33.26	5.66	0.90	25.10	288.4	0.090
74	9.89	33.13	5.34	1.47	50	10.70	32.99	5.53	1.13	25.29	270.8	0.146
98	9.32	33.46	4.54	1.74	75	9.85	33.15	5.32	1.48	25.55	245.6	0.210
150	8.75	34.02	2.38	2.58	100	9.30	33.49	4.50	1.76	25.91	212.3	0.268
197	8.29	34.11	1.63	2.85	150	8.75	34.02	2.38	2.58	26.41	165.5	0.362
291	6.85	34.09	1.58	3.08	200	8.24	34.11	1.62	2.86	26.56	152.2	0.441
389	5.64	34.14	1.19	3.29	250	7.53	34.10	1.57	3.01	26.66	143.3	0.515
482	5.80	34.29	0.44	3.49	300	6.67	34.09	1.57	3.09	26.77	133.0	0.584
581	5.36	34.39	0.40	3.53	400	5.63	34.15	1.09	3.32	26.95	116.9	0.709
774	4.62	34.43	0.50	3.49	500	5.75	34.31	0.40	3.51	27.06	107.7	0.821
967	3.96	34.47	0.64	3.47	600	5.27	34.40	0.42	3.53	27.19	96.0	0.923
1169	3.50	34.58	0.81	3.49	700	4.86	34.43	0.46	3.51	27.26	89.7	1.016
					800	4.53	34.43	0.52	3.49	26.30	86.5	1.105
					1000	3.87	34.48	0.67	3.47	27.41	77.1	1.268

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

CREST; July 15, 1950; 2318 GCT; 32°56'N, 122°06'W; sounding, 2,150 fm; wind, 320°, force 3; weather, overcast; sea, moderate; wire angle, 18°. 83.80

0	15.64	33.24	5.57	0.73	0	15.64	33.24	5.57	0.73	24.49	345.1	0.000	
10	15.41	33.15	5.55	0.71	10	15.41	33.15	5.55	0.71	24.48	347.1	0.035	
24	15.47	33.19	5.63	0.64	20	15.45	33.18	5.61	0.64	24.49	346.1	0.069	
47	12.36	33.10	5.93	0.74	30	15.45	33.18	5.70	0.65	24.49	346.5	0.104	
71	11.76	33.31	5.55	1.13	50	12.22	33.10	5.92	0.79	25.09	289.1	0.167	
95	10.74	33.53	4.84	1.49	75	11.67	33.36	5.40	1.22	25.40	260.9	0.236	
145	9.42	33.71	3.72	1.91	100	10.53	33.56	4.70	1.54	25.76	227.0	0.297	
190	8.70	33.91	2.84	2.32	150	9.34	33.72	3.60	1.96	26.08	196.9	0.403	
278	7.33	34.07	2.10	2.69	200	8.54	33.94	2.70	2.38	26.38	169.1	0.495	
372	6.16	34.14	1.22	3.06	250	7.75	34.04	2.26	2.59	26.58	151.0	0.574	
462	5.56	34.18	0.84	3.33	300	7.03	34.09	1.95	2.78	26.72	138.0	0.647	
557	5.08	34.29	0.54	3.46	400	5.91	34.15	1.03	3.16	26.92	120.1	0.776	
747	4.49	34.43	0.43	3.52	500	5.36	34.21	0.73	3.39	27.03	110.0	0.891	
938	3.84	34.49	0.59	3.58	600	4.92	34.33	0.47	3.49	27.18	97.0	0.995	
1138	3.44	34.56	0.86	3.51a)	700	4.61	34.41	0.43	3.52	27.27	88.3	1.087	
					800	4.31	34.45	0.45	3.54	27.34	82.7	1.172	
					1000	3.68	34.51	0.67	3.57	27.45	72.6	1.327	

CREST; July 15, 1950; 1759 GCT; 32°35'N, 122°47'W; sounding, 2,300 fm; wind, 320°, force 4; weather, drizzle; sea, rough; wire angle, 30°. 83.90

0	16.16	33.27	5.15	0.62	0	16.16	33.27	5.15	0.62	24.40	353.9	0.000	
9	16.06	33.66r	5.24	0.60	10	16.07	33.29	5.23	0.60	24.44	350.8	0.035	
22	16.14	33.31	5.17	0.63	20	16.14	33.31	5.17	0.62	24.44	351.2	0.070	
48	14.68	33.51r	5.37	0.69	30	16.13	33.31	5.18	0.66	24.44	351.4	0.105	
67	13.61	33.13	5.67	0.66	50	14.50	33.22	5.40	0.69	24.73	324.1	0.173	
93	11.83	33.12	5.63	0.85	75	13.10	33.12	5.66	0.68	24.94	304.6	0.252	
136	10.01	33.51	4.71	1.51	100	11.53	33.13	5.58	1.04	25.24	275.7	0.324	
178	8.92	33.75	4.36	1.64	150	9.60	33.61	4.55	1.59	25.95	209.1	0.446	
263	7.72	34.02	2.94	2.46	200	8.57	33.83	4.13	1.70	26.29	177.6	0.542	
348	6.70	34.23	1.83	3.01	250	7.88	33.99	3.25	2.26	26.52	156.5	0.625	
435	6.04	34.33	0.99	3.46	300	7.27	34.11	2.39	2.76	26.70	139.7	0.700	
522	5.34	–	0.73	3.45	400	6.27	34.30	1.28	3.37	26.99	113.6	0.826	
694	4.69	34.53	0.58	3.69	500	5.53	34.39	0.75	3.46	27.15	99.0	0.932	
880	4.05	34.56	0.55	3.63	600	4.97	34.47	0.63	3.53	27.28	87.1	1.026	
1074	3.57	34.54	0.75	3.55	700	4.68	34.53	0.58	3.69	27.36	80.1	1.109	
					800	4.34	34.56	0.55	3.67	27.42	74.9	1.186	
					1000	3.69	34.55	0.62	3.58	27.48	69.8	1.331	

CREST; July 14, 1950; 0727 GCT; 33°50'N, 118°37.5'W; sounding, 230 fm; wind, 220°, force 1; weather, cloudy; sea, moderate; wire angle, 0°. 87.35

0	19.34	33.62	6.76	0.32	0	19.34	33.62	6.76	0.32	23.90	401.6	0.000	
10	16.10	33.57	6.09	0.53	10	16.10	33.57	6.09	0.53	24.64	331.1	0.037	
30	12.98	33.49	6.07	0.89	20	14.10	33.51	6.08	0.72	25.04	294.1	0.068	
50	10.69	33.53	4.50	1.66	30	12.98	33.49	6.07	0.89	25.25	274.2	0.096	
75	10.04	33.60	3.54	1.90	50	10.69	33.53	4.50	1.66	25.70	231.0	0.147	
100	9.64	33.73	3.06	2.06	75	10.04	33.60	3.54	1.90	25.87	215.6	0.203	
155	9.11	33.95	2.43	2.47	100	9.64	33.73	3.06	2.06	26.04	199.9	0.255	
204	8.83	34.00	2.14	2.68	150	9.14	33.94	2.47	2.44	26.29	177.3	0.349	
254	8.52	34.11	1.67	2.78	200	8.85	34.00	2.16	2.67	26.38	169.4	0.435	
303	8.22	34.21	1.28	3.03	250	8.56	34.10	1.71	2.77	26.50	158.6	0.518	
358	7.88	34.29	0.95	3.01	300	8.24	34.20	1.32	3.02	26.63	147.2	0.594	

a) Alternate value, 3.38 μg at/L, not used in interpolation.

SIO

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	OBSERVED					INTERPOLATED					COMPUTED		
	Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
	m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
87.40	CREST; July 14, 1950; 1038 GCT; 33°41'N, 118°59'W; sounding, 440 fm; wind, 220°, force 1; weather, overcast; sea, moderate; wire angle, 8°.												
	0	18.42	33.66	5.56	0.51	0	18.42	33.66	5.56	0.51	24.16	376.6	0.000
	10	17.36	33.63	5.64	0.55	10	17.36	33.63	5.64	0.55	24.40	354.5	0.036
	24	14.34	33.58	6.09	0.70	20	15.05	33.59	6.05	0.64	24.89	307.5	0.070
	49	11.11	33.51	4.61	1.59	30	12.75	33.55	6.06	0.84	25.34	265.5	0.098
	74	10.19	33.66	3.95	2.01	50	11.03	33.51	4.57	1.59	25.63	238.1	0.149
	98	9.46	33.67	3.12	2.29	75	10.14	33.66	3.94	2.02	25.90	212.7	0.205
	152	8.60	33.98	2.53	2.32	100	9.38	33.67	3.10	2.29	26.04	200.2	0.256
	199	8.32	34.05	1.97	2.57	150	8.61	33.97	2.56	2.32	26.40	166.9	0.348
	245	8.09	34.14	1.50	2.71	200	8.31	34.05	1.96	2.57	26.50	157.6	0.430
	292	7.90	34.29	0.99	2.81	250	8.07	34.16	1.45	2.72	26.62	146.8	0.506
	344	7.44	34.27	0.87	3.31	300	7.85	34.29	0.95	2.84	26.76	134.8	0.576
	391	7.12	34.28	0.65	3.38	400	7.07	34.28	0.65	3.39	26.86	125.9	0.706
	488	6.56	34.31	0.64	3.46	500	6.48	34.31	0.62	3.47	26.97	116.9	0.827
	591	5.98	34.31	0.37	3.47	600	5.92	34.31	0.35	3.47	27.04	111.1	0.941
	690	5.34	34.38	0.27	3.50	700	(5.28)	(34.38)	(0.27)	(3.50)	(27.17)	(98.7)	(1.046)
87.50	CREST; July 14, 1950; 1551 GCT; 33°26.5'N, 119°44.5'W; sounding, 67 fm; wind, 280°, force 3; weather, fog; sea, moderate; wire angle, 5°.												
	0	15.30	33.80	5.08	0.62	0	15.30	33.80	5.08	0.62	25.00	296.8	0.000
	10	14.01	33.77	4.88	1.13	10	14.01	33.77	4.88	1.13	25.26	272.8	0.028
	30	10.02	33.91	2.91	2.17	20	11.75	33.85	4.25	1.50	25.76	224.7	0.053
	49	8.90	34.00	2.19	2.42	30	10.02	33.91	2.91	2.17	26.12	191.4	0.074
	74	8.50	34.07	1.73	2.60	50	8.79	34.00	2.18	2.43	26.39	165.8	0.110
	99	8.52	34.14	1.79	2.60	75	8.50	34.07	1.73	2.60	26.49	156.8	0.150
						100	(8.52)	(34.14)	(1.79)	(2.60)	(26.54)	(152.2)	(0.189)
87.60	CREST; July 14, 1950; 2034 GCT; 33°01'N, 120°21.5'W; sounding, 330 fm; wind, 320°, force 3; weather, overcast; sea, rough; wire angle, 11°.												
	0	13.44	33.49	5.68	0.89	0	13.44	33.49	5.68	0.89	25.15	282.4	0.000
	10	13.26	33.57	5.56	0.90	10	13.26	33.57	5.56	0.90	25.25	273.1	0.028
	24	10.48	33.17	5.54	1.31	20	13.19	33.19	5.56	1.10	24.98	299.8	0.056
	49	10.18	33.46	4.96	1.62	30	10.39	33.18	5.48	1.40	25.49	251.2	0.084
	73	9.46	33.60	4.07	1.88	50	10.15	33.47	4.95	1.62	25.75	226.3	0.132
	98	8.90	33.72	3.38	2.22	75	9.43	33.61	4.01	1.89	25.98	205.0	0.186
	150	8.45	33.98	2.59	2.48	100	8.85	33.73	3.35	2.23	26.17	187.6	0.235
	195	7.89	34.14	1.40	2.99	150	8.45	33.98	2.59	2.48	26.43	157.6	0.321
	240	7.44	34.27	1.01	3.14	200	7.83	34.16	1.33	3.02	26.66	142.4	0.396
	286	7.14	34.30	0.80	3.25	250	7.37	34.28	0.98	3.16	26.82	127.7	0.463
	338	6.68	34.31	0.62	3.36	300	7.00	34.30	0.75	3.28	26.89	122.0	0.526
	386	6.52	34.38	0.54	3.43	400	6.43	34.38	0.52	3.43	27.03	109.8	0.642
	435	6.12	34.36	0.45	3.43	500	(5.87)	(34.38)	(0.42)	(3.39)	(27.10)	(103.8)	(0.749)
	484	5.92	34.38	0.42	3.39								

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

CREST; July 15, 1950; 0131 GCT; 32°41'N, 121°02'W; sounding, 2,100 fm; wind, 320°, force 4; weather, overcast; sea, very rough; wire angle, 15°. 87.70

0	16.10	33.15	5.65	0.61	0	16.10	33.15	5.65	0.61	24.32	361.4	0.000
9	16.01	33.22	5.54	0.61	10	16.02	33.22	5.55	0.61	24.39	354.9	0.036
24	16.03	33.22	5.59	0.68	20	16.03	33.22	5.58	0.64	24.39	355.4	0.071
53	12.83	33.26	5.87	1.02	30	15.08	33.22	5.67	0.78	24.60	335.5	0.106
77	11.12	33.21	5.40	1.03	50	13.13	33.26	5.88	1.01	25.04	294.5	0.169
106	9.60	33.41	4.87	1.47	75	11.24	33.21	5.44	1.03	25.36	264.2	0.239
159	8.41	33.78	4.24	2.11	100	9.89	33.35	4.98	1.18	25.70	231.9	0.301
212	7.70	34.04	2.79	2.41	150	8.56	33.74	4.34	2.05	26.22	183.4	0.405
316	6.67	34.14	1.53	2.98	200	7.85	34.00	3.26	2.35	26.53	154.5	0.489
426	5.68	34.23	0.93	3.33	250	7.28	34.10	2.15	2.64	26.69	139.8	0.562
531	5.01	34.29	0.69	3.47	300	6.82	34.13	1.66	2.90	26.78	132.3	0.634
636	4.78	34.41	0.38	3.55	400	5.90	34.20	1.06	3.26	26.96	116.2	0.755
842	4.07 a)	34.43	0.57	3.72	500	5.19	34.28	0.75	3.44	27.11	102.7	0.864
1052	3.63	34.57	0.74	3.56	600	4.85	34.36	0.47	3.53	27.21	93.8	0.962
1255	3.25	34.54	0.94	3.42	700	4.58	34.43	0.42	3.60	27.30	86.1	1.052
					800	4.23	34.43	0.54	3.70	27.33	83.3	1.137
					1000	3.70	34.55	0.71	3.59	27.48	69.9	1.290

CREST; July 15, 1950; 0644 GCT; 32°20'N, 121°43'W; sounding, 2,150 fm; wind, 290°, force 3; weather, overcast; sea, rough; wire angle, 35°. 87.80

0	15.56	33.31	5.60	0.69	0	15.56	33.31	5.60	0.69	24.57	338.4	0.000
8	15.48	33.30	5.65	0.69	10	15.49	33.30	5.67	0.69	24.58	337.5	0.034
20	15.58	33.30	6.18	0.66	20	15.58	33.30	6.18	0.66	24.55	339.9	0.068
41	13.12	33.25	5.87	0.78	30	15.38	33.28	6.11	0.70	24.58	337.4	0.101
61	10.74	33.23	5.45	0.85	50	11.73	33.24	5.62	0.81	25.30	270.0	0.162
81	10.01	33.33	5.26	1.49	75	10.18	33.27	5.31	1.04	25.59	242.1	0.226
126	9.46	33.49	4.66	1.73	100	9.73	33.41	5.05	1.60	25.78	225.0	0.285
166	8.82	33.86	3.51	2.30	150	9.09	33.67	4.01	2.00	26.09	196.5	0.390
246	7.42	34.05	2.79	2.65	200	8.18	33.98	3.10	2.51	26.47	160.7	0.479
332	6.64	34.09	1.58	3.14	250	7.37	34.05	2.75	2.67	26.64	144.8	0.556
413	5.82	34.11	1.35	3.34	300	6.90	34.08	2.10	2.91	26.73	136.0	0.626
500	4.31	34.22	0.89	3.73	400	5.95	34.11	1.37	3.31	26.88	123.7	0.756
678	4.58	34.39	0.77	3.62	500	5.31	34.22	0.89	3.73	26.04	108.8	0.872
857	3.98	34.50	0.53	3.59	600	4.87	34.34	0.77	3.69	27.19	95.5	0.974
1048	3.50	34.56	0.90	3.55	700	4.50	34.40	0.77	3.61	27.28	87.4	1.065
					800	4.16	34.46	0.61	3.59	27.36	80.1	1.149
					1000	3.60	34.55	0.80	3.57	27.49	68.7	1.298

CREST; July 15, 1950; 1201 GCT; 32°01'N, 122°23'W; sounding, 2,230 fm; wind, 340°, force 4; weather, overcast; sea, rough; wire angle, 31°. 87.90

0	16.23	33.15	5.83	0.57	0	16.23	33.15	5.83	0.57	24.29	364.1	0.000
8	16.14	33.16	5.28	0.55	10	16.15	33.16	5.28	0.55	24.32	362.0	0.036
21	16.21	33.15	5.54	0.58	20	16.21	33.15	5.53	0.58	24.30	364.3	0.073
42	15.92	33.19	5.51	0.54	30	16.21	33.16	5.53	0.56	24.30	364.6	0.109
61	14.90	33.24	5.89	0.57	50	15.75	33.21	5.65	0.55	24.45	351.0	0.181
80	14.15	33.21	5.90	0.58	75	14.31	33.21	5.90	0.58	24.76	321.7	0.265
116	12.39	33.31	5.80	0.76	100	13.34	33.25	5.86	0.62	24.99	300.4	0.342
149	10.28	33.35	4.92	1.31	150	10.25	33.35	4.90	1.32	25.64	238.7	0.477
213	8.44	33.84	3.54	2.17	200	8.70	33.74	3.75	2.06	26.20	186.2	0.584
280	7.60	34.09	2.74	2.63	250	7.96	34.02	3.06	2.44	26.53	155.3	0.669
345	6.64	34.11	2.28	2.89	300	7.33	34.10	2.57	2.72	26.69	141.4	0.744
412	5.71	34.06	1.67	3.16	400	5.84	34.07	1.80	3.10	26.86	125.2	0.876
554	5.02	34.05	0.60	3.67	500	5.17	34.05	0.86	3.56	26.93	119.5	0.999
705	4.60	34.38	0.36	3.69	600	4.92	34.09	0.48	3.69	26.99	114.7	1.116
883	3.95	34.47	0.48	3.54	700	4.63	34.38	0.37	3.69	27.25	90.7	1.218
					800	4.21	34.45	0.39	3.66	27.35	81.6	1.304
					1000	(3.65)	(34.49)			(27.44)	(73.8)	(1.460)

a) Alternate value, 4.19°C, not used in interpolation.

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
90.30	CREST; July 14, 1950; 0203 GCT; 33°24'N, 117°55'W; sounding, 300 fm; wind, 220°, force 2; weather, cloudy; sea, moderate; wire angle, 0°.											
0	20.18	33.57	5.37	0.52	0	20.18	33.57	5.37	0.52	23.65	426.1	0.000
10	16.27	33.56	5.98	0.59	10	16.27	33.56	5.98	0.59	24.60	335.5	0.038
25	14.23	33.46	6.25	0.70	20	14.62	33.46	6.20	0.66	24.89	308.2	0.070
50	11.42	33.46	5.02	1.51	30	13.77	33.46	6.23	0.77	25.06	291.8	0.100
75	10.16	33.58	3.77	1.77	50	11.42	33.46	5.02	1.51	25.52	248.5	0.154
100	9.59	33.71	3.30	2.20	75	10.16	33.58	3.77	1.77	25.84	218.8	0.213
154	8.86	33.91	2.67	2.60	100	9.59	33.71	3.30	2.20	26.03	200.7	0.265
203	8.36	34.05	2.47	2.73	150	8.92	33.90	2.72	2.59	26.29	176.9	0.360
252	8.06	34.07	1.77	2.97	200	8.39	34.05	2.48	2.72	26.49	158.6	0.442
300	7.84	34.13	1.30	3.26	250	8.07	34.07	1.79	2.96	26.55	153.5	0.522
354	7.58	34.26	0.88	3.48	300	7.84	34.13	1.30	3.26	26.64	146.2	0.596
402	7.45	34.25	0.60	3.49	400	7.46	34.25	0.60	3.49	26.79	133.3	0.736
451	7.04	34.31	0.61	3.46	500	6.66	34.27	0.54	3.35	26.91	122.4	0.864
600	6.66	34.27	0.54	3.35								
90.37	CREST; July 13, 1950; 2132 GCT; 33°11'N, 118°23.5'W; sounding, 650 fm; wind, calm; weather, partly cloudy; sea, moderate; wire angle, 4°.											
0	20.56	33.68	5.26	0.63	0	20.56	33.68	5.26	0.63	23.63	427.8	0.000
10	18.48	33.65	5.55	0.65	10	19.00	33.64	5.55	0.65	24.00	392.2	0.041
29	14.45	33.56	6.15	0.67	20	16.35	33.57	6.06	0.66	24.67	329.4	0.077
49	10.41	33.57	3.99	1.96	30	14.45	33.56	6.15	0.67	25.00	297.8	0.108
74	9.46	33.75	2.95	2.18	50	10.39	33.57	3.78	1.98	25.79	222.9	0.160
99	9.13	33.91	2.63	2.09	75	9.45	33.75	2.93	2.18	26.09	194.9	0.213
153	8.79	34.00	1.90	2.52	100	9.12	33.91	2.62	2.09	26.27	178.5	0.259
201	8.47	34.11	1.64	2.90	150	8.82	33.99	1.94	2.50	26.38	168.7	0.346
299	8.10	34.24	0.93	3.13	200	8.48	34.11	1.65	2.89	26.52	155.7	0.427
401	7.35	34.23	0.68	3.35	250	8.26	34.20	1.33	3.04	26.63	146.7	0.503
499	6.31	34.27	0.39	3.40	300	8.09	34.24	0.92	3.13	26.69	142.0	0.575
601	5.86	34.27	0.41	3.46a)	400	7.37	34.23	0.69	3.35	26.78	133.7	0.713
699	5.40	34.34	0.33	3.50	500	6.28	34.27	0.39	3.40	26.96	117.3	0.838
802	4.94	34.33	0.32	3.50	600	5.87	34.27	0.41	3.46	27.02	113.0	0.953
1000	4.30	34.42	0.41	3.56	700	5.39	34.34	0.33	3.50	27.13	103.3	1.062
					800	4.95	34.33	0.32	3.50	27.17	99.3	1.163
					1000	4.30	34.42	0.41	3.56	27.32	86.4	1.349
90.45	CREST; July 13, 1950; 1712 GCT; 32°54'N, 118°55.5'W; sounding, 920 fm; wind, 270°, force 4; weather, cloudy; sea, rough; wire angle, 5°.											
0	17.23	33.66	5.44	0.47	0	17.23	33.66	5.44	0.47	24.45	349.2	0.000
10	17.13	33.69	5.49	0.45	10	17.13	33.69	5.49	0.45	24.50	344.9	0.034
25	14.44	33.59	5.76	0.67	20	15.90	33.62	5.74	0.56	24.73	323.3	0.068
49	10.66	33.66	3.96	1.76	30	13.20	33.59	5.74	1.19	25.28	271.0	0.098
74	9.46	33.75	3.19	2.09	50	10.45	33.66	3.94	1.76	25.84	218.0	0.147
99	9.19	33.87	2.75	2.28	75	9.44	33.75	3.17	2.09	26.09	194.8	0.198
153	8.56	34.07	2.34	2.49	100	9.18	33.87	2.74	2.28	26.23	182.3	0.245
200	8.12	34.14	1.77	2.71	150	8.59	34.06	2.36	2.48	26.47	160.1	0.331
296	7.38	34.22	1.05	2.98	200	8.12	34.14	1.77	2.71	26.60	148.1	0.408
395	6.84	34.33	0.59	3.26	250	7.69	34.18	1.30	2.85	26.70	139.6	0.480
490	6.19	34.32	0.41	3.27	300	7.35	34.23	1.02	2.99	26.79	132.0	0.547
590	5.72	34.45	0.34	3.27	400	6.82	34.33	0.59	3.26	26.94	118.9	0.673
786	4.82	34.45	0.35	3.49b)	500	6.14	34.32	0.39	3.27	27.02	111.8	0.789
982	4.20	34.52	0.47	3.46	600	5.65	34.45	0.35	3.28	27.18	97.2	0.893
1185	3.91	34.57	0.59	3.27	700	5.11	34.45	0.34	3.39	27.25	91.5	0.988
					800	4.77	34.45	0.36	3.49	27.29	88.2	1.078
					1000	4.16	34.53	0.48	3.45	27.42	76.9	1.242

a) Mean value of 3.39 and 3.52 μg at/L.

b) Alternate value, 3.32 μg at/L, not used in interpolation.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

CREST; July 13, 1950; 1207 GCT; 32°38'N, 119°29'W; sounding, 660 fm; wind, 270°, force 5; weather, cloudy; sea, very rough; wire angle, 42°. 90.53

0	16.51	33.66	5.44	0.61	0	16.51	33.66	5.44	0.61	24.62	333.0	0.000
7	16.45	33.69	5.51	0.61	10	16.41	33.69	5.51	0.60	24.67	329.0	0.033
18	16.09	33.64	5.48	0.60	20	16.05	33.64	5.46	0.60	24.71	325.2	0.066
37	11.76	33.64	4.61	1.34	30	12.50	33.64	5.16	0.64	25.46	254.0	0.095
55	10.00	33.77	3.38	1.97	50	10.26	33.69	3.53	1.86	25.91	211.7	0.141
74	9.49	33.86	3.07	2.20	75	9.46	33.86	3.05	2.22	26.17	186.8	0.191
115	8.72	33.96	2.28	2.62	100	8.97	33.93	2.58	2.52	26.31	174.5	0.236
153	8.20	34.14	1.84	2.69	150	8.23	34.12	1.88	2.69	26.57	150.4	0.317
229	7.66	34.25	1.29	3.02	200	7.82	34.23	1.48	2.84	26.72	137.0	0.390
310	7.04	34.27	0.78	3.35	250	7.52	34.26	1.15	3.14	26.79	131.4	0.456
389	6.70	34.32	0.66	3.38	300	7.12	34.27	0.83	3.33	26.85	125.9	0.521
474	6.22	34.38	0.36	3.42	400	6.64	34.33	0.60	3.38	26.96	116.3	0.642
559	5.86	34.33	0.37	3.65	500	6.09	34.38	0.36	3.47	27.08	106.6	0.754
651	5.50	34.38	0.31	3.69	600	5.69	34.34	0.35	3.68	27.10	104.9	0.859
844	4.61	34.49	0.44	3.57	700	5.29	34.42	0.32	3.67	27.20	95.8	0.960
					800	4.84	34.47	0.40	3.60	27.30	87.6	1.051
					1000	(4.07)	(34.53)			(27.43)	(75.7)	(1.214)

CREST; July 13, 1950; 0642 GCT; 32°24'N, 119°56'W; sounding, 1,100 fm; wind, 320°, force 6; weather, partly cloudy; sea, very rough; wire angle, 37°. 90.60

0	15.48	33.40	5.64	0.66	0	15.48	33.40	5.64	0.66	24.66	329.7	0.000
8	15.38	33.30	5.66	0.68	10	15.38	33.30	5.67	0.68	24.60	335.4	0.033
20	15.41	33.33	5.77	0.66	20	15.41	33.33	5.77	0.66	24.61	334.3	0.067
44	11.34	33.21	5.56	1.10	30	14.50	33.30	5.73	0.71	24.79	317.8	0.099
63	10.27	33.33	5.14	1.72	50	10.95	33.21	5.48	1.30	25.41	258.7	0.157
85	9.66	33.49	4.21	2.39r	75	9.90	33.42	4.58	1.86	25.76	226.3	0.218
124	8.79	33.91	3.63	2.16	100	9.28	33.67	3.94	2.04	26.05	198.6	0.271
161	8.10	34.00	3.44	2.18	150	8.27	33.98	3.48	2.18	26.45	161.3	0.361
237	7.84	34.24	1.16	3.02	200	7.93	34.11	2.85	2.37	26.61	147.5	0.437
316	7.10	34.27	0.61	3.33	250	7.78	34.25	1.01	3.10	26.74	135.9	0.509
391	6.48	34.33	0.52	3.52	300	7.33	34.27	0.68	3.28	26.82	128.8	0.575
469	6.15	34.31	0.53	3.52	400	6.43	34.33	0.52	3.52	26.99	113.6	0.696
631	5.56	34.42	0.35	3.67	500	6.03	34.32	0.52	3.55	27.03	110.4	0.808
804	4.87	34.40	0.41	3.77	600	5.68	34.40	0.38	3.64	27.14	101.3	0.914
987	4.18	34.29r	1.00r	3.41r	700	5.28	34.41	0.37	3.72	27.20	96.5	1.012
					800	4.89	34.40	0.40	3.77	27.24	93.3	1.108
					1000	(4.12)	(34.45)			(27.36)	(82.3)	(1.284)

CREST; July 13, 1950; 0054 GCT; 32°06.5'N, 120°39'W; sounding, 1,800 fm; wind, 320°, force 5; weather, overcast; sea, rough; wire angle, 27°. 90.70

0	16.63	33.15	5.52	0.58	0	16.63	33.15	5.52	0.58	24.20	372.8	0.000
9	16.55	33.10	6.01	0.58	10	16.53	33.10	6.00	0.57	24.19	374.5	0.037
22	16.52	33.12	5.63	0.52	20	16.52	33.12	5.70	0.52	24.21	373.2	0.075
49	15.38	33.23	5.42	0.55	30	16.45	33.16	5.51	0.53	24.25	369.1	0.112
71	14.11	33.15	5.41	0.58	50	15.38	33.23	5.42	0.55	24.55	341.6	0.183
97	11.92	33.24	5.13	0.80	75	13.65	33.15	5.39	0.59	24.85	313.1	0.265
144	9.73	33.46	4.50	1.45	100	11.76	33.25	5.06	0.90	25.30	270.8	0.338
190	8.52	33.84	3.08	2.16	150	9.55	33.50	4.35	1.52	25.88	216.5	0.459
281	7.38	34.05	2.27	2.77	200	8.34	33.88	2.94	2.25	26.37	170.5	0.557
377	6.28	34.07	1.34	3.35	250	7.73	34.01	2.48	2.60	26.56	152.9	0.637
468	5.51	34.20	0.84	3.48	300	7.15	34.05	2.12	2.89	26.67	142.5	0.710
560	5.17	34.33	0.47	3.62	400	6.05	34.09	1.17	3.41	26.85	126.3	0.845
744	4.59	34.45	0.38	3.51	500	5.36	34.25	0.70	3.52	27.06	107.2	0.962
940	4.07	34.53	0.60	3.48	600	5.05	34.37	0.41	3.62	27.19	95.4	1.064
					700	4.74	34.43	0.40	3.55	27.28	88.3	1.155
					800	4.42	34.47	0.43	3.49	27.34	82.6	1.241
					1000	(3.92)	(34.53)			(27.44)	(74.2)	(1.397)

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

90.80 CREST; July 12, 1950; 1927 GCT; 31°45.5'N, 121°22'W; sounding, 2,100 fm; wind, 360°, force 4; weather, partly cloudy; sea, rough; wire angle, 32°.

0	16.64	33.20	5.33	0.56	0	16.64	33.20	5.33	0.56	24.24	369.5	0.000
8	16.54	33.22	5.40	0.56	10	16.54	33.22	5.42	0.56	24.28	366.1	0.036
21	16.60	33.21	5.46	0.59	20	16.59	33.21	5.45	0.59	24.26	368.2	0.073
46	14.99	33.22	5.63	0.56	30	16.57	33.21	5.52	0.58	24.26	368.1	0.110
68	15.31	33.46	5.49	0.55	50	14.98	33.23	5.62	0.56	24.63	333.3	0.180
93	14.15	33.51	5.51	0.59	75	15.29	33.48	5.48	0.55	24.76	322.1	0.262
139	11.68	33.64	4.95	0.94	100	13.64	33.53	5.48	0.61	25.14	285.7	0.338
185	9.09	33.64	4.08	1.79	150	11.00	33.64	4.74	1.10	25.74	230.0	0.467
278	7.60	33.99	3.36	2.35	200	8.76	33.65	3.92	1.93	26.12	193.9	0.574
374	6.31	34.00	2.23	2.93	250	7.95	33.93	3.54	2.21	26.46	161.9	0.662
466	5.74	34.11	0.86	3.38	300	7.30	34.00	3.19	2.46	26.61	148.2	0.739
559	5.26	34.23	0.59	3.61	400	6.09	34.02	1.79	3.08	26.79	132.0	0.879
746	4.44	34.34	0.43	3.57	500	5.57	34.16	0.69	3.51	26.96	116.4	1.004
940	3.88	34.45	0.57	3.53	600	5.04	34.27	0.56	3.61	27.11	102.9	1.113
1134	3.40	34.51	0.82	3.37	700	4.61	34.32	0.45	3.58	27.20	94.9	1.212
					800	4.26	34.37	0.44	3.55	27.28	88.0	1.304
					1000	3.73	34.48	0.65	3.49	27.42	75.5	1.467

90.90 CREST; July 12, 1950; 1341 GCT; 31°28'N, 122°00.5'W; sounding, 2,050 fm; wind, 320°, force 5; weather, partly cloudy; sea, rough; wire angle, 23°.

0	16.98	33.44	5.32	0.49	0	16.98	33.44	5.32	0.49	24.34	359.5	0.000
9	16.98	33.39	5.36	0.46	10	16.89	33.39	5.36	0.46	24.33	361.4	0.036
22	16.94	33.50	5.34	0.45	20	16.93	33.49	5.35	0.45	24.39	355.4	0.072
46	16.64	33.62	5.45	0.46	30	16.94	33.55	5.37	0.45	24.44	351.5	0.107
68	16.50	33.68	5.47	0.41	50	16.63	33.63	5.45	0.45	24.57	339.4	0.176
90	16.59	33.77	5.44	0.42	75	16.53	33.72	5.46	0.41	24.66	331.2	0.260
134	13.94	33.58	5.38	0.61	100	16.57	33.76	5.44	0.44	24.68	329.9	0.343
174	11.58	33.66	4.79	1.10	150	13.00	33.60	5.26	0.81	25.33	269.3	0.492
252	8.58	33.95	3.37	2.27	200	10.25	33.75	4.15	1.50	25.96	210.1	0.612
336	7.49	34.05	2.60	2.73	250	8.62	33.94	3.40	2.25	26.37	171.2	0.708
417	6.34	34.04	2.08	2.89	300	7.89	34.02	2.88	2.59	26.54	155.2	0.789
504	5.76	34.16	0.88	3.41	400	6.56	34.04	2.19	2.86	26.74	136.7	0.935
680	4.84	34.32	0.43	3.45	500	5.78	34.15	0.95	3.41	26.93	119.8	1.064
864	4.17	34.51	0.48	3.61	600	5.24	34.26	0.50	3.45	27.08	105.5	1.176
1059	3.67	34.51	0.71	3.56	700	4.75	34.34	0.43	3.47	27.20	95.0	1.277
					800	4.37	34.48	0.45	3.54	27.36	81.1	1.365
					1000	3.82	34.51	0.65	3.57	27.44	74.3	1.520

90.100 CREST; July 12, 1950; 0805 GCT; 31°06'N, 122°41'W; sounding, 2,200 fm; wind, 360°, force 5; weather, partly cloudy; sea, moderate; wire angle, 21°.

0	17.24	33.46	4.84	0.50	0	17.24	33.46	4.84	0.50	24.30	363.8	0.000
9	17.16	33.51	5.21	0.50	10	17.15	33.51	5.22	0.50	24.36	358.6	0.036
23	16.99	33.53	5.30	0.53	20	17.10	33.53	5.27	0.53	24.38	356.3	0.072
51	16.34	33.58	5.32	0.50	30	16.86	33.54	5.30	0.53	24.45	350.5	0.107
75	16.07	33.64	5.46	0.50	50	16.37	33.58	5.32	0.50	24.59	337.3	0.176
103	15.16	33.60	5.41	0.55	75	16.07	33.64	5.46	0.50	24.71	326.7	0.259
153	12.79	33.68	5.02	0.79	100	15.29	33.60	5.43	0.54	24.85	313.9	0.339
203	10.54	33.80	4.54	1.29	150	12.95	33.67	5.03	0.77	25.39	263.2	0.483
302	8.04	34.04	3.01	2.29	200	10.67	33.79	4.57	1.26	25.91	214.4	0.603
405	6.70	34.16	1.84	3.05	250	9.06	33.92	3.90	1.78	26.29	179.4	0.702
504	5.67	34.13	1.08	3.44	300	8.07	34.03	3.04	2.27	26.52	157.2	0.785
604	5.30	34.29	0.51	3.67	400	6.76	34.16	1.90	3.02	26.81	130.6	0.929
801	4.46	34.52	0.36	3.78	500	5.69	34.13	1.13	3.43	26.93	120.1	1.055
1005	3.84	34.49	0.56	3.67	600	5.31	34.28	0.52	3.67	27.09	105.6	1.168
1205	3.34	34.52	0.82	3.57	700	4.92	34.45	0.37	3.77	27.27	89.0	1.265
					800	4.47	34.52	0.36	3.78	27.38	79.3	1.349
					1000	3.85	34.49	0.56	3.67	27.42	77.1	1.505

CREST; July 12, 1950; 0158, 0223 GCT; 30°45.5'N, 123°26.5'W; sounding, 2,200 fm; wind, 360°, force 4; weather, cloudy; sea, rough; wire angle, 5°, 10°. 90.110

OBSERVED Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	INTERPOLATED Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	COMPUTED σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m
0	16.86	33.22	5.39	0.57	0	16.85	33.22	5.39	0.57	24.21	372.6	0.000
10	16.74	33.21	5.80	0.54	10	16.74	33.21	5.80	0.54	24.23	371.0	0.037
25	16.56	33.22	5.37	0.53	20	16.57	33.21	5.41	0.53	24.26	367.9	0.074
49	15.59	33.15	5.59	0.53	30	16.41	33.21	5.41	0.53	24.30	364.6	0.111
74	16.12	33.58	5.56	0.48	50	15.58	33.15	5.59	0.53	24.44	351.7	0.182
98	15.50	33.57	5.55	0.43	75	16.12	33.58	5.56	0.48	24.65	332.5	0.268
151	12.59	33.60	5.02	0.75	100	15.42	33.57	5.54	0.43	24.80	318.9	0.349
197	10.06	33.69	4.52	2.11	150	12.67	33.60	5.02	0.72	25.39	262.1	0.494
					200	9.91	33.70	4.48	2.16	25.98	208.1	0.612
286	7.86	33.96	3.46	2.88	250	8.44	33.84	3.92	2.64	26.32	176.0	0.708
383	6.80	34.09	1.27	3.37	300	7.67	33.99	3.13	2.97	26.55	154.4	0.791
476	6.04	34.13	1.12	3.49	400	6.63	34.10	1.20	3.41	26.78	133.4	0.935
575	5.79	34.26	0.54	3.54	500	5.95	34.15	1.03	3.51	26.91	122.0	1.063
770	4.64	34.34	0.39	3.54	600	5.70	34.28	0.51	3.54	27.04	110.4	1.179
965	4.00	34.43	0.63	3.67	700	5.09	34.32	0.43	3.54	27.15	100.7	1.288
1167	3.44	34.51	0.90	3.43	800	4.51	34.35	0.42	3.56	27.24	92.4	1.381
					1000	3.89	34.45	0.69	3.65	27.38	79.5	1.553

CREST; July 11, 1950; 2038 GCT; 30°24.5'N, 124°04.5'W; sounding, 2,200 fm; wind, 360°, force 4; weather, overcast; sea, moderate; wire angle, 10°. 90.120

0	16.75	33.31	5.43	0.55	0	16.75	33.31	5.43	0.55	24.30	363.8	0.000
9	16.61	33.28	5.36	0.50	10	16.60	33.28	5.36	0.50	24.31	363.1	0.036
24	16.63	33.40	5.40	0.45	20	16.62	33.36	5.37	0.46	24.37	358.0	0.072
49	16.21	33.60	5.50	0.41	30	16.62	33.47	5.38	0.44	24.45	350.2	0.108
73	16.16	33.64	5.73	0.41	50	16.20	33.60	5.50	0.41	24.65	332.1	0.176
98	15.11	33.60	5.66	0.43	75	16.15	33.63	5.73	0.41	24.68	329.7	0.259
134p	14.23	33.73	5.34	0.67	100	15.00	33.60	5.65	0.43	24.91	307.9	0.338
214p	9.52	33.91	4.20	1.66	150	13.78	33.77	5.14	0.86	25.30	272.2	0.483
326p	7.55	34.11	2.59	2.72	200	10.25	33.88	4.40	1.51	26.06	200.5	0.601
442p	6.26	34.23	1.05	3.41	250	8.54	33.98	3.66	2.03	26.41	167.2	0.692
552p	5.67	34.36	0.46	3.66	300	7.80	34.07	2.95	2.51	26.60	150.3	0.773
757p	4.74	34.51	0.43	3.67	400	6.72	34.19	1.60	3.20	26.84	127.9	0.912
958p	4.06	34.56	0.66	3.67	500	5.87	34.29	0.51	3.61	27.03	110.5	1.031
1166p	3.52	34.52	0.94	3.52	600	5.48	34.41	0.46	3.66	27.17	98.0	1.135
					700	5.02	34.48	0.45	3.67	27.28	88.0	1.228
					800	4.55	34.53	0.46	3.67	27.38	79.6	1.312
					1000	3.94	34.56	0.72	3.66	27.46	72.1	1.463

CREST; July 17, 1950; 1743 GCT; 32°51.5'N, 117°32'W; sounding, 465 fm; wind, 270°, force 1; weather, overcast; sea, slight; wire angle, 0°. 93.30

0	18.90	33.63	5.21	0.46	0	18.90	33.63	5.21	0.46	24.02	390.2	0.000
10	16.38	33.57	5.85	0.50	10	16.38	33.57	5.85	0.50	24.58	337.1	0.036
25	15.16	33.57	6.04	0.55	20	15.50	33.57	6.00	0.54	24.78	318.4	0.069
50	11.72	33.45	5.18	1.08	30	14.68	33.56	6.03	0.58	24.95	302.4	0.100
74	10.57	33.60	4.32	1.51	50	11.72	33.45	5.18	1.08	25.46	254.3	0.156
99	9.70	33.69	3.74	1.74	75	10.50	33.60	4.31	1.52	25.79	223.0	0.215
152	8.81	33.89	2.90	2.26	100	9.67	33.69	3.73	1.75	26.01	203.2	0.269
200	8.59	34.07	2.24	2.49	150	8.84	33.88	2.91	2.24	26.29	177.2	0.364
249	8.65	34.16	1.72	2.85	200	8.59	34.07	2.24	2.49	26.47	160.4	0.448
298	8.59	34.13	1.45	2.86	250	8.65	34.16	1.71	2.85	26.54	155.5	0.527
399	7.92	34.33	0.78	3.34	300	8.59	34.13	1.44	2.86	26.52	157.6	0.605
496	7.23	34.38	0.54	3.37	400	7.91	34.33	0.77	3.34	26.78	134.3	0.751
598	6.30	34.33	0.48	3.37	500	7.19	34.38	0.53	3.37	26.93	121.6	0.880
696	5.66	34.38	0.30	3.38	600	6.30	34.33	0.47	3.37	27.01	114.7	0.998
800	5.11	34.45	0.33	3.34	700	5.64	34.38	0.30	3.38	27.13	103.5	1.107
					800	5.11	34.45	0.33	3.34	27.25	92.5	1.205

S10

CCOFI 5007

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

93.40 CREST; July 17, 1950; 2324 GCT; 32°30'N, 118°13'W; sounding, 980 fm; wind, 270°, force 1; weather, overcast; sea, moderate; wire angle, 5°.

0	18.12	33.52	5.02	0.54	0	18.12	33.52	5.02	0.54	24.13	380.0	0.000
10	17.50	33.57	5.14	0.51	10	17.50	33.57	5.14	0.51	24.32	362.2	0.037
25	17.06	33.57	5.30	0.49	20	17.20	33.57	5.24	0.50	24.39	355.7	0.073
49	14.45	33.51	5.75	0.70	30	16.75	33.56	5.40	0.50	24.49	346.7	0.108
74	11.69	33.48	5.12	1.17	50	14.25	33.51	5.75	0.71	25.00	298.0	0.173
98	10.58	33.58	4.47	1.63	75	11.60	33.48	5.10	1.18	25.50	250.7	0.241
150	9.07	33.87	2.77	2.38	100	10.54	33.60	4.41	1.64	25.79	224.3	0.301
196	8.32	34.05	2.37	2.56	150	9.07	33.87	2.77	2.38	26.25	181.0	0.406
290	7.52	34.18	1.36	3.16	200	8.28	34.06	2.32	2.58	26.52	156.4	0.486
389	6.92	34.29	0.73	3.46	250	7.83	34.14	1.85	2.88	26.64	144.7	0.561
484	6.22	34.35	0.40	3.52	300	7.46	34.19	1.26	3.21	26.74	136.4	0.632
583	5.77	34.44	0.34	3.58	400	6.86	34.30	0.69	3.47	26.91	121.6	0.761
779	4.94	34.43	0.40	3.60	500	6.14	34.36	0.38	3.53	27.05	108.8	0.876
975	4.26	34.43	0.50	3.59	600	5.70	34.44	0.35	3.58	27.17	98.7	0.980
1178	3.81	34.49	0.63	3.56a)	700	5.31	34.43	0.37	3.60	27.21	95.4	1.077
					800	4.85	34.43	0.42	3.60	27.26	90.7	1.170
					1000	4.19	34.43	0.52	3.59	27.34	84.5	1.345

93.50 CREST; July 18, 1950; 0635 GCT; 32°10'N, 118°54'W; sounding, 850 fm; wind, 270°, force 1; weather, overcast; sea, moderate; wire angle, 0°.

0	17.86	33.53	5.47	0.59	0	17.86	33.53	5.47	0.59	24.20	373.4	0.000
10	16.41	33.42	6.17	0.57	10	16.41	33.42	6.17	0.57	24.46	348.5	0.036
25	14.54	33.51	6.21	0.73	20	15.00	33.48	6.21	0.60	24.82	314.5	0.069
50	12.11	33.48	6.01	-	30	14.01	33.51	6.20	0.83	25.05	292.8	0.100
75	10.86	33.52	5.28	1.51	50	12.11	33.48	6.01	1.17	25.41	259.0	0.155
100	10.10	33.58	4.50	2.02	75	10.86	33.52	5.28	1.51	25.67	234.8	0.216
154	8.70	33.91	3.47	2.38	100	10.10	33.58	4.50	2.02	25.85	218.4	0.273
204	7.98	34.04	2.90	2.72	150	8.79	33.89	3.52	2.37	26.30	175.7	0.372
301	7.19	34.21	1.32	3.05	200	8.04	34.03	2.95	2.69	26.53	155.1	0.454
403	6.60	34.29	0.73	3.43	250	7.55	34.12	2.20	2.91	26.67	142.2	0.529
501	6.17	34.31	0.50	3.49	300	7.20	34.21	1.33	3.05	26.79	131.3	0.597
603	5.65	34.36	0.43	3.51	400	6.61	34.29	0.75	3.43	26.93	115.3	0.720
803	4.73	34.40	0.50	3.52	500	6.17	34.31	0.51	3.49	27.01	112.9	0.834
1001	4.11	34.49	0.60	3.51	600	5.67	34.36	0.43	3.51	27.11	104.1	0.943
1205	3.58	34.54	0.92	3.58	700	5.16	34.39	0.44	3.52	27.20	96.4	1.043
					800	4.74	34.40	0.49	3.52	27.25	91.4	1.137
					1000	4.12	34.49	0.60	3.51	27.39	79.3	1.308

93.60 CREST; July 18, 1950; 1807 GCT; 31°51'N, 119°32'W; sounding, 1,150 fm; wind, 270°, force 1; weather, cloudy; sea, moderate; wire angle, 0°.

0	17.53	33.74	5.40	0.56	0	17.53	33.74	5.40	0.56	24.44	350.4	0.000
10	16.62	33.66	5.54	0.52	10	16.62	33.66	5.54	0.52	24.60	335.6	0.034
25	15.67	33.68	5.70	0.55	20	16.46	33.67	5.66	0.54	24.64	331.8	0.067
50	10.41	33.70	3.57	1.93	30	14.65	33.68	5.67	0.58	25.05	293.0	0.099
75	9.27	33.84	2.75	2.36	50	10.41	33.70	3.57	1.93	25.89	213.8	0.015
99	8.85	34.02	2.39	2.52	75	9.27	33.84	2.75	2.36	26.19	185.4	0.199
153	8.36	34.11	1.85	2.82	100	8.84	34.02	2.39	2.52	26.40	166.0	0.243
201	7.86	34.22	1.40	3.03	150	8.39	34.10	1.89	2.80	26.53	154.1	0.323
299	7.02	34.29	0.76	3.12	200	7.87	34.22	1.42	3.03	26.70	138.5	0.397
401	6.48	34.33	0.64	3.45	250	7.41	34.28	1.02	3.11	26.82	128.3	0.463
499	5.91	34.40	0.40	3.50b)	300	7.01	34.29	0.75	3.12	26.88	122.7	0.526
602	5.39	34.35	0.34	3.55	400	6.49	34.33	0.65	3.45	26.98	114.3	0.645
802	4.54	34.49	0.54	3.54	500	5.90	34.40	0.40	3.50	27.11	102.7	0.753
999	4.00	34.55	0.63	3.51	600	5.40	34.35	0.35	3.55	27.13	101.4	0.855
1203	3.52	34.52	0.88	3.44	700	4.98	34.39	0.42	3.54	27.22	94.2	0.953
					800	4.55	34.49	0.54	3.54	27.35	82.4	1.041
					1000	3.99	34.55	0.64	3.51	27.45	73.2	1.196

a) Alternate value, 3.44 μg at/L, not used in interpolation.

b) Mean value of 3.44 and 3.56 μg at/L.

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

CREST; July 18, 1950; 2352 GCT; 31°30'N, 120°13.5'W; sounding, 2,100 fm; wind, 360°, force 1; weather, cloudy; sea, slight; wire angle, 19°. 93.70

0	18.30	33.19	5.47	0.61a)	0	18.30	33.19	5.47	0.61	23.84	407.9	0.000
9	16.02	33.12	5.52	0.70	10	16.00	33.12	5.52	0.70	24.32	361.8	0.038
23	15.92	33.12	5.55	0.72	20	15.93	33.12	5.53	0.72	24.34	360.3	0.074
47	13.71	33.05	5.89	0.73	30	15.89	33.10	5.60	0.72	24.34	361.2	0.111
70	12.26	33.12	5.74	1.07	50	13.50	33.05	5.87	0.74	24.81	316.7	0.178
94	10.14	33.20	5.12	1.31	75	12.00	33.14	5.65	1.14	25.17	282.8	0.253
145	9.37	33.73	3.35	2.21	100	10.00	33.22	4.88	1.40	25.58	243.4	0.319
191	8.38	33.93	3.20	2.30	150	9.28	33.76	3.33	2.23	26.12	192.9	0.429
282	7.06	34.00	2.61	2.79	200	8.19	33.95	3.18	2.33	26.44	163.1	0.517
377	6.12	34.04	1.43	3.30	250	7.43	33.99	2.88	2.56	26.59	149.8	0.593
467	5.53	34.19	0.83	3.59	300	6.86	34.00	2.44	2.90	26.67	142.5	0.669
563	5.46	34.31	0.40	3.67	400	5.93	34.06	1.22	3.39	26.84	127.2	0.804
754	4.69	34.50	0.53	3.63	500	5.48	34.24	0.63	3.64	27.04	109.3	0.922
945	4.06	34.43	0.68	3.58	600	5.39	34.35	0.40	3.67	27.14	101.4	1.027
1147	3.48	34.54	0.93	3.48	700	5.00	34.47	0.47	3.65	27.28	88.4	1.122
					800	4.48	34.49	0.60	3.62	27.35	81.5	1.207
					1000	3.90	34.45	0.75	3.56	27.38	79.7	1.368

CREST; July 19, 1950; 0607 GCT; 31°11'N, 120°53.5'W; sounding, 2,050 fm; wind, 360°, force 1; weather, overcast; sea, moderate; wire angle, 7°. 93.80

0	17.63	33.13	6.04	0.71	0	17.63	33.13	6.04	0.71	23.95	397.2	0.000
10	16.46	33.10	5.85r	0.58	10	16.46	33.10	6.30	0.58	24.21	372.8	0.038
30	16.29	33.17	6.56	0.57	20	16.35	33.12	6.48	0.57	24.24	369.5	0.075
49	15.02	33.24	6.26	0.59	30	16.29	33.17	6.56	0.57	24.29	365.0	0.112
74	14.19	33.21	6.47	0.59	50	15.00	33.24	6.26	0.59	24.64	332.9	0.182
98	11.92	33.22	5.62	0.93	75	14.05	33.21	6.47	0.59	24.82	316.5	0.263
152	9.72	33.57	4.50	1.87	100	11.75	33.22	5.58	1.02	25.28	272.9	0.337
200	9.04	34.13r	3.17	2.43	150	9.77	33.54	4.53	1.84	25.87	216.9	0.459
296	7.97	34.00	1.94	3.03	200	9.04	33.77	3.17	2.43	26.17	189.4	0.561
398	6.82	34.23	1.14	3.20	250	8.47	33.90	2.41	2.79	26.36	172.0	0.651
495	5.90	34.23	0.58	3.42	300	7.92	34.01	1.90	3.04	26.53	156.5	0.733
596	5.55	34.40	0.34	3.53	400	6.78	34.23	1.13	3.20	26.86	125.6	0.874
796	4.55	34.42	0.48	3.54	500	5.88	34.23	0.57	3.43	26.98	115.0	0.994
992	3.88	34.47	0.79	3.46	600	5.54	34.40	0.34	3.53	27.16	99.5	1.102
1195	3.41	34.52	1.12	3.41	700	5.10	34.42	0.38	3.54	27.23	93.4	1.198
					800	4.53	34.42	0.50	3.54	27.29	87.3	1.288
					1000	3.85	34.47	0.81	3.46	27.40	77.6	1.453

CREST; July 19, 1950; 1125 GCT; 30°50.5'N, 121°35'W; sounding, 2,200 fm; wind, 360°, force 1; weather, overcast; sea, moderate; wire angle, 2°. 93.90

0	17.32	33.24	5.62	0.59	0	17.32	33.24	5.62	0.59	24.11	381.9	0.000
10	16.45	33.19	5.80	0.58	10	16.45	33.19	5.80	0.58	24.27	366.3	0.037
25	16.37	33.18	6.04	-	20	16.40	33.18	5.95	0.57	24.28	366.3	0.074
50	14.29	33.15	6.41	0.57	30	16.35	33.17	6.15	0.57	24.28	365.4	0.111
74	13.46	33.37	6.34	0.74	50	14.29	33.15	6.41	0.57	24.72	325.3	0.180
99	13.62	33.53	6.20	0.83	75	13.47	33.39	6.33	0.75	25.07	292.1	0.257
152	10.58	33.40	5.06	1.03	100	13.62	33.53	6.18	0.84	25.15	285.1	0.329
200	9.17	33.82	3.60	1.43	150	10.90	33.40	5.10	1.03	25.57	246.0	0.461
296	7.40	34.07	2.88	2.22	200	9.17	33.82	3.60	1.43	26.20	186.8	0.570
397	5.92	34.14	2.14	2.61	250	8.21	33.99	3.18	1.90	26.47	161.4	0.657
493	5.34	34.22	0.96	3.21	300	7.34	34.07	2.87	2.24	26.66	143.8	0.733
595	5.06	34.31	0.51	3.57	400	5.89	34.14	2.10	2.62	26.91	120.5	0.865
796	4.43	34.44	0.50	3.71	500	5.31	34.23	0.90	3.25	27.05	107.9	0.979
993	3.89	34.56	0.77	3.69	600	5.04	34.31	0.51	3.58	27.15	99.8	1.083
1197	3.38	34.54	1.03	3.74	700	4.77	34.38	0.50	3.69	27.23	92.3	1.179
					800	4.42	34.44	0.51	3.72	27.32	84.8	1.268
					1000	3.87	34.56	0.78	3.69	27.47	71.1	1.424

a) Many double values; the smoothest property distribution was obtained from the values listed.

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

97.32 CREST; July 21, 1950; 0937 GCT; 32°12.5'N, 117°17.5'W; sounding, 740 fm; wind, 320°, force 2; weather, overcast; sea, slight; wire angle, 0°.

0	19.18	33.62	5.45	0.47	0	19.18	33.62	5.45	0.47	23.94	397.9	0.000
10	16.35	33.57	6.19	0.56	10	16.35	33.57	6.19	0.56	24.58	337.2	0.036
25	12.20	33.51	5.86	0.92	20	12.85	33.52	6.00	0.76	25.30	269.2	0.067
50	10.32	33.57	4.05	1.77	30	11.65	33.51	5.64	1.07	25.52	248.4	0.093
74	9.84	33.69	3.11	2.21	50	10.32	33.57	4.05	1.77	25.80	221.9	0.140
99	9.34	33.75	3.27	2.14	75	9.79	33.69	3.12	2.21	25.99	204.8	0.193
153	9.00	34.02	2.79	2.61	100	9.32	33.76	3.27	2.14	26.12	192.5	0.243
202	8.64	34.04	2.18	2.72	150	9.02	34.01	2.80	2.60	26.36	170.2	0.334
300	8.59	34.22	1.33	3.04	200	8.66	34.04	2.19	2.72	26.44	163.5	0.418
402	8.12	34.29	0.92	3.23	250	8.58	34.11	1.72	2.87	26.51	158.1	0.498
500	6.96	34.25	0.80	3.34	300	8.59	34.22	1.33	3.04	26.59	150.9	0.574
603	6.26	34.31	0.45	3.66	400	8.13	34.29	0.93	3.23	26.72	140.6	0.720
803	5.12	34.34	0.37	3.63	500	6.96	34.25	0.80	3.34	26.85	128.4	0.855
1000	4.26	34.47	0.47	3.62	600	6.28	34.31	0.47	3.66	26.99	115.7	0.977
1203	3.53	34.57	0.87	3.43	700	5.73	34.34	0.38	3.65	27.08	107.8	1.089
					800	5.13	34.34	0.38	3.63	27.16	101.0	1.193
					1000	4.26	34.47	0.47	3.62	27.36	82.3	1.377

97.40 CREST; July 21, 1950; 0438 GCT; 31°55'N, 117°50'W; sounding, 750 fm; wind, 320°, force 3; weather, partly cloudy; sea, moderate; wire angle, 19°.

0	18.60	33.49	5.22	0.56	0	18.60	33.49	5.22	0.56	23.99	393.3	0.000
9	18.39	33.51	5.39	0.54	10	18.38	33.51	5.40	0.54	24.06	386.9	0.039
24	16.91	33.49	5.61	0.54	20	17.55	33.50	5.55	0.54	24.25	368.7	0.077
47	13.43	33.22	6.11	0.63	30	15.00	33.46	5.74	0.56	24.81	316.3	0.111
70	12.61	33.39	5.69	0.89	50	13.29	33.22	6.10	0.66	24.98	300.2	0.173
94	11.48	33.48	5.07	1.27	75	12.42	33.41	5.55	0.96	25.29	270.8	0.244
141	9.37	33.71	3.75	1.88	100	11.14	33.51	4.91	1.35	24.61	241.1	0.308
192	8.56	33.89	2.89	2.47	150	9.17	33.75	3.59	2.00	26.13	191.8	0.417
285	7.56	34.10	1.98	2.76	200	8.47	33.91	2.78	2.50	26.37	170.3	0.507
383	7.06	34.16	0.93	3.35	250	7.88	34.02	2.30	2.66	26.54	154.4	0.588
476	6.38	34.26	0.49	3.42	300	7.47	34.12	1.85	2.82	26.68	141.9	0.662
575	5.90	34.36	0.44	3.58	400	6.96	34.17	0.78	3.38	26.79	132.7	0.800
767	5.02	34.38	0.43	3.59	500	6.24	34.29	0.47	3.45	26.98	115.4	0.924
960	4.31	34.36	0.55	3.58	600	5.80	34.37	0.45	3.58	27.10	105.1	1.034
1162	3.76	34.49	0.83	3.50	700	5.35	34.38	0.43	3.58	27.16	100.7	1.137
					800	4.88	34.38	0.46	3.58	27.22	94.7	1.234
					1000	4.18	34.37	0.60	3.58	27.29	88.8	1.418

97.50 CREST; July 20, 1950, 2012 GCT; 31°31'N, 118°26'W; sounding, 1,430 fm; wind 320°, force 3; weather, cloudy; sea, moderate; wire angle, 25°.

0	18.31	33.57	5.24	0.64	0	18.31	33.57	5.24	0.64	24.12	380.6	0.000
9	17.89	33.58	5.20	0.54	10	17.65	33.58	5.20	0.54	24.29	364.9	0.037
22	17.37	33.49	5.34	0.63	20	17.37	33.49	5.30	0.63	24.29	365.4	0.074
45	15.17	33.53	5.89	0.64	30	17.35	33.50	5.64	0.63	24.30	364.3	0.110
67	12.75	33.47	5.60	1.02	50	14.50	33.52	5.87	0.65	24.96	302.3	0.177
89	11.08	33.49	4.70	1.48	75	12.10	33.47	5.30	1.25	25.40	260.4	0.247
135	9.09	33.81	3.44	2.08	100	10.40	33.55	4.35	1.65	25.77	225.5	0.308
178	8.50	33.98	2.69	2.40	150	8.84	33.89	3.13	2.20	26.30	176.5	0.409
262	7.43	34.08	2.07	2.93	200	8.23	34.02	2.49	2.55	26.49	158.5	0.492
351	6.63	34.22	0.98	3.49	250	7.59	34.07	2.14	2.86	26.63	146.5	0.568
436	6.28	34.27	0.58	3.61	300	7.05	34.13	1.72	3.19	26.75	135.3	0.639
526	5.79	34.33	0.42	3.65	400	6.41	34.26	0.70	3.59	26.94	118.6	0.766
708	5.00	34.45	0.39	3.75	500	5.96	34.31	0.47	3.64	27.03	110.2	0.880
896	4.31	34.47	0.53	3.73	600	5.42	34.38	0.42	3.69	27.15	99.7	0.985
1096	3.63	34.51	0.69	3.52	700	5.02	34.45	0.40	3.75	27.26	90.2	1.080
					800	4.66	34.46	0.45	3.74	27.31	86.0	1.168
					1000	3.91	34.49	0.63	3.64	27.41	76.9	1.331

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OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
CREST; July 20, 1950; 1223 GCT; 31°15'N, 119°11'W; sounding, 1,850 fm; wind, 320°, force 1; weather, overcast; sea, slight; wire angle, 0°.													97.60
0	18.25	33.40	5.36	0.63	0	18.25	33.40	5.36	0.63	24.01	391.5	0.000	
10	16.74	33.40	5.65	0.56	10	16.74	33.40	5.65	0.56	24.37	357.3	0.037	
25	14.46	33.49	5.92	0.80	20	15.00	33.46	5.87	0.64	24.81	316.0	0.071	
50	12.01	33.42	5.42	1.17	30	13.81	33.48	5.89	0.89	25.07	291.0	0.101	
75	10.68	33.48	4.75	1.57	50	12.01	33.42	5.42	1.17	25.39	261.3	0.157	
99	9.49	33.57	3.96	2.01	75	10.68	33.48	4.75	1.57	25.67	234.8	0.219	
153	8.47	33.98	2.99	2.47	100	9.44	33.57	3.93	2.03	25.95	208.7	0.274	
202	7.98	34.02	2.74	2.58	150	8.51	33.97	3.02	2.46	26.41	165.6	0.368	
298	7.13	34.16	1.18	3.14	200	8.01	34.02	2.75	2.58	26.53	155.3	0.448	
401	6.48	34.32	0.63	3.43	250	7.52	34.08	2.04	2.80	26.65	144.5	0.523	
498	5.91	34.37	0.40	3.56	300	7.12	34.16	1.15	3.15	26.76	134.0	0.592	
601	5.49	34.40	0.33	3.67 a)	400	6.50	34.32	0.64	3.43	26.97	115.1	0.717	
802	4.58	34.51	0.44	3.59	500	5.90	34.37	0.38	3.56	27.09	105.3	0.827	
1000	3.96	34.64	0.68	3.63	600	5.50	34.40	0.33	3.67	27.16	99.0	0.929	
1204	3.44	34.65	0.88	3.55	700	5.05	34.45	0.35	3.64	27.26	90.5	1.024	
					800	4.61	34.51	0.44	3.59	27.35	81.9	1.110	
					1000	3.96	34.64	0.68	3.63	27.53	66.3	1.260	
CREST; July 20, 1950; 0652, 0713 GCT; 30°55'N, 119°50'W; sounding, 2,000 fm; wind, 320°, force 2; weather, overcast; sea, slight; wire angle, 20°, 22°.													97.70
0	17.78	33.10	5.32	0.55	0	17.78	33.10	5.32	0.55	23.89	402.4	0.000	
9	15.90	33.12	5.54	0.57	10	15.86	33.12	5.54	0.57	24.36	358.5	0.038	
23	15.36	33.19	5.71	0.57	20	15.43	33.17	5.68	0.57	24.49	346.1	0.073	
46	15.04	33.33	5.75	0.64	30	15.21	33.23	5.73	0.58	24.58	337.4	0.107	
69	12.14	33.13	5.78	0.90	50	15.03	33.32	5.77	0.68	24.69	327.5	0.174	
91	10.67	33.24	5.14	1.19	75	11.49	33.14	5.71	0.98	25.26	273.8	0.249	
					100	10.25	33.32	4.61	1.38	25.62	240.0	0.313	
133	8.89	33.60	3.67	2.11	150	8.56	33.73	3.33	2.34	26.21	184.0	0.420	
173	8.28	33.86	2.92	2.54	200	8.05	33.95	2.43	2.69	26.46	161.2	0.506	
255	7.66	34.06	1.58	2.89	250	7.69	34.05	1.65	2.88	26.60	149.4	0.583	
341	6.78	34.13	1.18	3.31	300	7.10	34.10	1.32	3.08	26.72	138.2	0.655	
424	6.57	34.22	0.53	3.53	400	6.63	34.20	0.74	3.48	26.86	125.9	0.787	
513	6.00	34.24	0.37	3.57	500	6.12	34.24	0.37	3.57	26.96	117.5	0.909	
692	5.04	34.33	0.35	3.73	600	5.47	34.28	0.35	3.65	27.07	107.5	1.021	
876	4.31	34.40	0.47	3.69	700	5.01	34.33	0.36	3.73	27.17	98.9	1.125	
1076	3.76	34.44	0.75	3.58	800	4.61	34.38	0.41	3.71	27.25	91.4	1.220	
					1000	3.94	34.43	0.63	3.63	27.36	81.5	1.393	
CREST; July 19, 1950; 2338 GCT; 30°36'N, 120°31'W; sounding, 2,150 fm; wind, 040°, force 2; weather, cloudy; sea, moderate; wire angle, 0°.													97.80
0	18.73	33.17	5.62	0.65	0	18.73	33.17	5.62	0.65	23.71	419.6	0.000	
10	16.66	33.17	5.66	0.63	10	16.66	33.17	5.66	0.63	24.21	372.3	0.039	
25	16.18	33.13	5.70	0.63	20	16.23	33.13	5.68	0.63	24.28	366.1	0.076	
50	14.61	33.13	5.77	0.69	30	16.16	33.13	5.72	0.64	24.30	364.9	0.113	
75	12.81	33.12	5.82	0.80	50	14.61	33.13	5.77	0.69	24.64	332.9	0.183	
100	11.40	33.17	5.46	1.03	75	12.81	33.12	5.82	0.80	25.00	299.1	0.262	
153	9.15	33.46	4.13	1.94	100	11.40	33.17	5.46	1.03	25.30	270.5	0.333	
202	8.75	33.87	2.84	2.25	150	9.20	33.44	4.20	1.92	25.89	215.3	0.454	
298	7.82	34.09	1.67	3.05	200	8.77	33.86	2.90	2.24	26.29	178.3	0.553	
400	6.60	34.18	0.99	3.36	250	8.31	34.02	2.15	2.68	26.48	160.7	0.638	
498	6.02	34.25	0.56	3.53	300	7.78	34.09	1.65	3.06	26.61	148.5	0.714	
601	5.48	34.29	0.52	3.60	400	6.60	34.18	0.99	3.36	26.85	127.2	0.852	
803	4.58	34.51	0.44	3.59	500	6.00	34.25	0.55	3.53	26.98	115.1	0.974	
1001	3.96	34.40	0.68	3.59	600	5.49	34.29	0.52	3.60	27.08	106.9	1.085	
1205	3.46	34.51	1.04	3.48	700	5.02	34.35	0.54	3.62	27.18	97.5	1.187	
					800	4.62	34.40	0.55	3.62	27.27	90.0	1.281	
					1000	3.97	34.40	0.67	3.59	27.34	84.1	1.455	

a) Alternate value, 3.54 μg at/L, not used in interpolation.

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CCOFI 5007

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

97.90 CREST; July 19, 1950; 1723 GCT; 30°15'N, 121°11'W; sounding, 2,100 fm; wind, 280°, force 1; weather, overcast; sea, moderate; wire angle, 12°.

0	18.06	33.33	5.77	0.60	0	18.06	33.33	5.77	0.60	24.00	392.4	0.000
10	17.09	33.30	5.83	0.56	10	17.09	33.30	5.83	0.56	24.21	372.7	0.038
25	17.18	33.39	5.75	0.59	20	17.17	33.38	5.80	0.58	24.25	368.8	0.075
49	15.74	33.30	5.19	0.60	30	17.13	33.38	5.65	0.59	24.26	368.2	0.112
73	14.23	33.31	6.24	0.61	50	15.60	33.30	5.20	0.60	24.55	341.2	0.183
98	13.44	33.46	5.70	0.71	75	14.17	33.31	6.24	0.62	24.87	311.5	0.265
151	10.86	33.58	4.65	1.47	100	13.36	33.47	5.68	0.72	25.16	284.6	0.339
199	9.18	33.86	3.44	2.09	150	10.90	33.58	4.67	1.46	25.71	232.7	0.468
295	7.89	34.11	2.20	2.97	200	9.16	33.87	3.42	2.11	26.23	183.6	0.573
396	6.91	34.20	1.28	3.31	250	8.39	34.04	2.68	2.60	26.48	160.6	0.659
492	6.12	34.29	0.57	3.67	300	7.83	34.12	2.15	3.00	26.63	147.2	0.735
594	5.57	34.37	0.49	3.78	400	6.86	34.20	1.25	3.32	26.83	129.0	0.873
792	4.69	34.43	0.83u	3.74	500	6.07	34.30	0.54	3.69	27.01	112.4	0.994
987	4.00	34.49	0.45u	3.75	600	5.55	34.37	(0.49)	3.78	27.13	101.9	1.101
1190	3.49	34.54	0.89	3.64	700	5.09	34.42	(0.51)	3.75	27.23	93.2	1.198
					800	4.67	34.43	(0.56)	3.74	27.28	88.4	1.289
					1000	3.95	34.49	(0.73)	3.75	27.41	77.3	1.455

100.30 PAOLINA-T; July 20, 1950; 0837 GCT; 31°40.5'N, 116°46.5'W; sounding, 248 fm; wind, direction missing, force 2; weather, partly cloudy; sea, moderate; wire angle, 18°.

0	18.84	33.53E	5.06	0.44	0	18.84	33.53	5.06	0.44	23.96	396.2	0.000
10	16.64	33.51	5.05	0.46	10	16.64	33.51	5.05	0.46	24.48	347.1	0.037
29	13.88	33.40	5.69	0.49	20	14.75	33.42	5.27	0.47	24.83	313.7	0.070
48	12.21	33.48	4.89	0.88	30	13.85	33.40	5.69	0.50	25.00	297.6	0.101
71	10.34	33.77	4.04	1.34	50	12.05	33.50	4.81	0.92	25.44	256.6	0.156
95	9.53	33.58	3.26	1.70	75	10.14	33.77	3.92	1.40	25.99	204.4	0.214
147	9.11	34.00	-	2.05	100	9.47	33.58	3.15	1.74	25.95	208.3	0.265
195	9.00	34.05	1.72	2.25	150	9.10	34.00	2.20	2.06	26.34	172.2	0.361
243	8.96	34.07	1.36	2.43	200	8.99	34.05	1.68	2.27	26.40	167.6	0.445
291	8.96	34.31	-	2.51	250	8.95	34.08	1.31	2.45	26.43	166.0	0.529
344	8.09	-	-	-	300	8.94	34.31	1.10	2.52	26.61	148.7	0.607
393	7.91	34.29	0.92	2.70	400	(7.89)	(34.29)	(0.91)	(2.71)	(26.76)	(136.7)	(0.750)

100.40 PAOLINA-T; July 20, 1950; 0225 GCT; 31°22'N, 117°32'W; sounding, 1,100 fm; wind, 320°, force 2; weather partly cloudy; sea, moderate; wire angle, 09°.

0	18.90	33.55E	4.93	0.51	0	18.90	33.55	4.93	0.51	23.96	396.0	0.000
10	18.24	33.53	4.84	0.48	10	18.24	33.53	4.84	0.48	24.11	382.2	0.039
25	17.96	33.55	5.07	0.47	20	18.05	33.53	4.90	0.47	24.15	378.1	0.077
49	16.68	33.64	5.33	0.48	30	17.79	33.57	5.15	0.47	24.25	369.3	0.114
73	14.35	33.35	5.40	0.52	50	16.67	33.64	5.34	0.48	24.57	339.5	0.185
98	12.85	33.55	4.90	0.75	75	14.22	33.35	5.40	0.52	24.89	309.8	0.266
153	9.72	33.68	4.39	1.56	100	12.73	33.56	4.87	0.80	25.35	266.1	0.338
202	8.82	33.96	3.12	1.98	150	9.89	33.67	4.45	1.52	25.95	209.1	0.457
300	7.55	34.05	2.12	2.41	200	8.85	33.95	3.19	1.96	26.34	172.9	0.553
403	6.60	34.14	1.13	2.74	250	8.16	34.01	2.50	2.21	26.49	159.4	0.636
501	5.92	34.27	0.58	3.00	300	7.55	34.05	2.12	2.41	26.61	147.6	0.712
604	5.45	34.27	0.31	3.03	400	6.63	34.13	1.16	2.72	26.81	131.0	0.851
807	4.72	34.42	0.42	3.07	500	5.94	34.27	0.59	3.00	27.01	112.9	0.973
1003	4.12	34.52	0.58	3.08	600	5.46	34.27	0.31	3.04	27.06	108.0	1.084
1206	3.60	34.52	0.89	3.02	700	5.08	34.32	0.36	3.06	27.15	100.6	1.188
					800	4.75	34.41	0.43	3.07	27.26	90.9	1.284
					1000	4.14	34.52	0.58	3.08	27.41	77.4	1.452

E Evaporation of salinity samples occurred on all Paolina-T stations of Cruise 5007. Individual salinity values must be considered doubtful (see introduction). They appear to be 0.06‰ higher on an average.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

PAOLINA-T; July 19, 1950; 1849 GCT; 31°05'N, 118°14'W; sounding, 1,500 fm; wind, 40°, force 1; weather, cloudy; sea, slight; wire angle, 0°. 100.50

0	18.42	33.46E	4.46	0.48	0	18.42	33.46	4.46	0.48	24.01	390.1	0.000
10	17.90	33.46	4.29	0.49	10	17.90	33.46	4.29	0.49	24.14	379.2	0.038
25	15.28	33.35	4.51	0.51	20	16.85	33.36	4.35	0.50	24.31	363.0	0.076
50	14.15	33.40	4.97	0.54	30	14.93	33.35	4.68	0.52	24.74	322.7	0.110
75	11.94	33.28	3.85	0.88	50	14.15	33.40	4.97	0.54	24.94	304.0	0.172
100	11.02	33.49	3.81	1.25	75	11.94	33.28	3.85	0.88	25.29	271.3	0.244
155	9.05	33.78	2.88	1.80	100	11.02	33.49	3.81	1.25	25.62	240.3	0.308
205	8.25	34.02	2.41	2.07	150	9.19	33.75	3.01	1.76	26.13	192.1	0.417
304	7.24	34.23	1.37	2.58	200	8.31	33.99	2.45	2.04	26.46	162.0	0.505
408	6.19	34.20	0.62	2.92	250	7.75	34.16	1.97	2.30	26.67	142.1	0.581
508	5.71	34.38	0.40	3.00	300	7.28	34.23	1.42	2.56	26.80	130.9	0.649
613	5.24	34.45	0.33	3.08	400	6.26	34.20	0.66	2.90	26.91	120.9	0.775
817	4.51	34.56	0.33	3.09	500	5.74	34.36	0.40	3.00	27.10	103.8	0.888
1016	-	34.60	-	3.08	600	5.30	34.44	0.34	3.07	27.22	93.5	0.986
1220	3.43	34.52	0.74	3.03	700	4.89	34.49	0.33	3.09	27.31	85.6	1.076
					800	4.55	34.55	0.33	3.09	27.39	78.1	1.157
					1000	3.99	34.60	0.47	3.08	27.49	69.6	1.306

PAOLINA-T; July 19, 1950; 1329 GCT; 30°43'N, 118°53'W; sounding, 2,000 fm; wind, direction missing, force 1; weather, cloudy; sea, moderate; wire angle, 0°. 100.60

0	18.64	33.53E	4.01	0.48	0	18.64	33.53	4.01	0.48	24.01	391.3	0.000
10	17.30	33.35	4.17	0.47	10	17.30	33.35	4.17	0.47	24.20	373.5	0.038
30	15.32	33.60	5.53	0.49	20	16.20	33.56	5.05	0.48	24.62	334.2	0.074
50	12.53	33.51	4.36	0.67	30	15.32	33.60	5.53	0.49	24.84	313.1	0.106
75	11.21	33.66	4.09	1.15	50	12.53	33.51	4.36	0.67	25.35	264.8	0.164
100	9.89	33.62	3.48	1.56	75	11.21	33.66	4.09	1.15	25.71	230.8	0.226
155	8.68	34.04	2.45	1.99	100	9.89	33.62	3.48	1.56	25.92	211.6	0.281
204	7.84	34.18	1.82	2.17	150	8.76	34.01	2.51	1.95	26.40	166.4	0.376
303	6.91	34.25	1.23	2.53	200	7.90	34.17	1.86	2.15	26.66	142.7	0.452
407	6.36	34.43	0.59	2.87	250	7.35	34.22	1.50	2.34	26.78	131.9	0.521
506	5.74	34.51	0.35	2.98	300	6.94	34.25	1.25	2.52	26.86	125.0	0.585
610	5.35	34.54	0.26	3.03	400	6.40	34.41	0.64	2.84	27.06	107.2	0.701
814	4.43	34.61	0.35	3.03	500	5.78	34.51	0.35	2.97	27.21	93.1	0.801
1012	-	34.56	0.51	3.07	600	5.37	34.54	0.26	3.02	27.29	86.9	0.892
1216	3.33	34.67	0.66	2.94	700	4.96	34.57	0.26	3.02	27.36	80.6	0.976
					800	4.50	34.61	0.34	3.03	27.45	73.0	1.052
					1000	3.81	34.56	0.50	3.07	27.48	70.5	1.196

PAOLINA-T; July 19, 1950; 0752 GCT; 30°21'N, 119°32'W; sounding, 2,200 fm; wind, 340°, force 1; weather, cloudy; sea, missing; wire angle, 3°. 100.70

0	18.01	33.35E	4.58	0.47	0	18.01	33.35	4.58	0.47	24.03	389.6	0.000
10	15.70	33.40	4.48	0.49	10	15.70	33.40	4.48	0.49	24.60	335.4	0.036
30	15.55	33.60	4.74	0.56	20	15.61	33.54	4.69	0.52	24.73	323.0	0.069
50	12.28	33.17	4.52	0.71	30	15.55	33.60	4.74	0.56	24.80	317.3	0.101
75	10.82	33.30	4.08	0.96	50	12.28	33.17	4.52	0.71	25.13	285.9	0.161
100	9.76	33.37	3.29	1.36	75	10.82	33.30	4.08	0.96	25.50	250.7	0.229
155	8.73	34.04	2.06r	2.06	100	9.76	33.37	3.29	1.36	25.74	228.6	0.288
205	8.10	34.31	2.28	2.24	150	8.80	33.97	3.71	2.02	26.37	169.9	0.388
303	7.44	34.42	1.10	2.82	200	8.16	34.30	2.32	2.23	26.72	136.8	0.464
407	6.73	34.42	-	2.91	250	7.76	34.39	1.79	2.44	26.85	125.2	0.530
506	6.02	34.52	0.32	3.01	300	7.46	34.42	1.13	2.81	26.92	119.4	0.591
610	5.43	34.33	0.30	3.06	400	6.78	34.42	0.53	2.91	27.01	111.6	0.706
813	4.47	34.56	0.37	3.08	500	6.07	34.52	0.33	3.00	27.19	96.0	0.810
1011	-	34.63	0.46	3.06	600	5.48	34.34	0.30	3.06	27.12	103.2	0.910
1215	3.38	34.65	0.65	3.00	700	4.99	34.42	0.32	3.08	27.24	92.0	1.007
					800	4.53	34.55	0.37	3.08	27.39	77.9	1.093
					1000	3.88	34.63	0.45	3.03	27.53	66.1	1.237

E Evaporation (see page 236).

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

100.80 PAOLINA-T; July 19, 1950; 0225 GCT; 30°00'N, 120°10'W; sounding, 2,000 fm; wind, 320°, force 1; weather, partly cloudy; sea, slight; wire angle, 0°.

0	19.09	33.19E	4.40	0.55	0	19.09	33.19	4.40	0.55	23.64	426.6	0.000
10	16.13	33.44	4.33	0.56	10	16.13	33.44	4.33	0.56	24.54	341.3	0.038
30	15.75	33.43	4.50	0.56	20	15.89	33.44	4.40	0.56	24.59	336.2	0.072
50	13.29	33.28	4.54	0.58	30	15.75	33.43	4.50	0.56	24.62	334.2	0.106
75	12.12	33.43	4.79	0.86	50	13.29	33.28	4.54	0.58	25.02	296.0	0.169
100	-	33.48	4.20	1.13	75	12.12	33.43	4.79	0.86	25.36	264.0	0.239
155	9.20	33.69	3.15	1.74	100	10.52	33.48	4.20	1.13	25.70	232.8	0.301
205	8.67	33.97	2.29	2.05	150	9.29	33.66	3.25	1.69	26.05	200.3	0.409
304	6.73	34.07	1.92	2.35	200	8.72	33.96	2.36	2.02	26.37	170.4	0.502
407	5.89	34.22	0.86	2.77	250	7.92	34.02	2.03	2.20	26.54	154.8	0.583
505	5.69	34.51	0.33	2.97	300	6.77	34.07	1.93	2.34	26.74	136.0	0.656
609	5.33	34.52	0.33	3.04	400	5.93	34.21	0.95	2.75	26.96	115.7	0.782
811	4.54	34.57	0.33	3.04	500	5.70	34.51	0.35	2.97	27.22	92.1	0.886
1008	-	34.61	0.55	3.05	600	5.37	34.52	0.33	3.04	27.27	88.5	0.976
1211	3.40	34.58	0.68	2.96	700	4.94	34.54	0.33	3.04	27.34	82.5	1.061
					800	4.58	34.57	0.33	3.04	27.41	77.0	1.141
					1000	3.95	34.61	0.55	3.05	27.50	68.4	1.287

100.90 PAOLINA-T; July 18, 1950; 2051 GCT; 29°35'N, 120°47'W; sounding, 2,300 fm; wind, 040°, force 1; weather, overcast; sea, moderate; wire angle, 5°.

0	18.77	33.63E	4.39	0.44	0	18.77	33.63	4.39	0.44	24.05	387.0	0.000
10	18.08	33.69	4.14	0.44	10	18.08	33.69	4.14	0.44	24.27	366.9	0.038
30	17.48	33.70	4.16	0.44	20	17.75	33.70	4.15	0.44	24.36	358.7	0.074
50	16.37	33.62	4.31	0.46	30	17.48	33.70	4.16	0.44	24.42	352.8	0.110
75	14.18	33.58	4.94	0.48	50	16.37	33.62	4.31	0.46	24.62	334.2	0.178
100	12.72	33.58	4.71	0.68	75	14.18	33.58	4.94	0.48	25.07	291.9	0.256
154	10.15	33.75	3.14	1.63	100	12.72	33.58	4.71	0.68	25.37	264.6	0.326
204	9.76	33.98	2.06	2.20	150	10.20	33.73	3.25	1.57	25.95	209.7	0.444
303	8.06	34.23	1.76	2.38	200	9.78	33.96	2.08	2.17	26.20	187.0	0.544
407	7.07	34.35	0.95	2.74	250	9.25	34.12	1.89	2.30	26.41	167.7	0.632
506	6.33	34.34	0.43	2.95	300	8.11	34.22	1.77	2.37	26.67	143.8	0.710
610	5.76	34.40	0.33	3.03	400	7.11	34.35	1.02	2.71	26.91	121.3	0.842
813	4.77	34.45	0.33	3.12	500	6.38	34.34	0.45	2.94	27.00	113.5	0.960
1012	-	34.62	0.51	3.12	600	5.82	34.40	0.34	3.03	27.12	103.2	1.068
1216	3.48	34.58	0.68	3.03	700	5.34	34.43	0.33	3.09	27.21	95.8	1.168
					800	4.84	34.45	0.33	3.12	27.28	89.3	1.260
					1000	4.07	34.61	0.50	3.12	27.49	69.8	1.420

100.100 PAOLINA-T; July 18, 1950; 1535 GCT; 29°16'N, 121°28'W; sounding, 2,300 fm; wind, 100°, force 1; weather, cloudy; sea, moderate; wire angle, 0°.

0	18.27	33.49E	4.16	0.47	0	18.27	33.49	4.16	0.47	24.07	385.2	0.000
10	17.71	33.57	4.10	0.46	10	17.71	33.57	4.10	0.46	24.27	366.8	0.038
30	17.69	33.60	4.34	0.44	20	17.70	33.58	4.27	0.45	24.28	366.4	0.074
50	16.62	33.68	4.33	0.45	30	17.69	33.60	4.34	0.44	24.30	364.9	0.111
75	14.81	33.46	4.54	0.49	50	16.62	33.68	4.33	0.45	24.61	335.5	0.181
100	13.45	33.42	4.48	0.52	75	14.81	33.46	4.54	0.49	24.85	313.3	0.262
155	11.05	33.62	3.81	1.21	100	13.45	33.42	4.48	0.52	25.10	290.0	0.337
205	9.04	33.89	2.84	1.85	150	11.25	33.59	3.86	1.11	25.65	238.0	0.469
305	7.55	34.07	1.80	2.35	200	9.21	33.86	2.92	1.80	26.21	185.4	0.576
409	6.62	34.27	0.84	2.80	250	8.20	33.99	2.30	2.11	26.47	161.2	0.662
508	6.00	34.27	0.42	3.01	300	7.60	34.06	1.84	2.34	26.62	148.1	0.739
612	5.42	34.40	0.29	3.06	400	6.70	34.26	0.90	2.77	26.90	122.3	0.874
816	4.54	34.51	0.39	3.12a)	500	6.05	34.27	0.45	3.00	26.99	114.3	0.992
1015	-	34.51	0.58	3.11	600	5.49	34.38	0.30	3.06	27.15	100.3	1.100
1219	3.41	34.61	0.74	3.01	700	5.00	34.48	0.30	3.08	27.29	87.6	1.194
					800	4.60	34.51	0.38	3.12	27.36	81.6	1.278
					1000	3.98	34.51	0.56	3.11	27.42	76.1	1.437

a) Alternate value, 3.05 μg at/L, not used in interpolation.

E Evaporation (see page 236).

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

PAOLINA-T; July 18, 1950; 0954 GCT; 28°57'N, 122°09'W; sounding, 2,600 fm; wind, 320°, force 1; weather, overcast; sea, slight; wire angle, 0°. 100.110

0	17.92	33.33E	4.21	0.48	0	17.92	33.33	4.21	0.48	24.04	388.8	0.000
10	17.35	33.33	4.82	0.50	10	17.35	33.33	4.82	0.50	24.17	376.2	0.038
30	16.38	33.35	4.34	0.51	20	16.81	33.34	4.68	0.51	24.31	363.7	0.075
50	15.79	33.37	4.75	0.47	30	16.38	33.35	4.34	0.51	24.41	353.7	0.111
75	15.09	33.40	4.80	0.46	50	15.79	33.37	4.75	0.47	24.56	340.2	0.180
100	14.17	33.60	4.53	0.49	75	15.09	33.40	4.80	0.46	24.74	323.6	0.263
155	11.33	33.64	3.64	0.94	100	14.17	33.60	4.53	0.49	25.09	291.0	0.340
205	9.11	33.78	2.94	1.71	150	11.62	33.64	3.70	0.86	25.62	241.0	0.473
303	7.57	34.20	2.16	2.18	200	9.28	33.76	3.00	1.64	26.13	193.7	0.582
406	6.47	34.20	1.06	2.68	250	8.26	34.04	2.50	1.99	26.50	158.4	0.670
505	5.88	34.29	0.44	2.95	300	7.62	34.20	2.18	2.17	26.72	138.2	0.744
608	5.25	34.29	0.31	3.06a)	400	6.52	34.20	1.12	2.65	26.88	124.4	0.875
810	4.41	34.51	0.37	3.10	500	5.91	34.29	0.46	2.94	27.03	111.0	0.993
1007	-	34.61	0.54	3.09	600	5.29	34.29	0.31	3.06	27.10	104.3	1.101
1211	3.33	34.51	0.72	2.98	700	4.79	34.37	0.31	3.09	27.22	93.2	1.199
					800	4.45	34.50	0.36	3.10	27.36	80.5	1.286
					1000	3.86	34.61	0.54	3.08	27.51	67.3	1.434

PAOLINA-T; July 18, 1950; 0418 GCT; 28°40'N, 122°49'W; sounding, 2,400 fm; wind, 360°, force 1; weather, partly cloudy; sea, slight; wire angle, 0°. 100.120

0	18.18	33.57E	4.71	0.50	0	18.18	33.57	4.71	0.50	24.15	377.7	0.000
10	17.63	33.40	4.96	0.50	10	17.63	33.40	4.96	0.50	24.16	377.6	0.038
30	-	33.44	4.90	0.49	20	17.21	33.41	4.92	0.50	24.26	367.6	0.075
50	16.61	33.60	5.03	0.43	30	16.95	33.44	4.90	0.49	24.35	359.7	0.111
75	15.99	33.58	5.22	0.43	50	16.61	33.60	5.03	0.43	24.55	341.1	0.182
100	-	33.86	4.94	0.42	75	15.99	33.58	5.22	0.43	24.67	330.1	0.265
155	12.38	33.69	4.78	0.78	100	15.08	33.86	4.94	0.42	25.10	290.3	0.343
205	9.52	33.78	3.79	1.44	150	12.58	33.69	4.80	0.72	25.48	254.6	0.479
303	7.60	34.06	2.56	2.12	200	9.84	33.76	3.92	1.37	26.03	202.9	0.594
407	6.37	34.14	1.34	2.68	250	8.45	33.90	3.10	1.81	26.37	171.7	0.687
506	5.76	34.22	0.57	2.93	300	7.65	34.05	2.58	2.11	26.60	149.7	0.767
611	5.22	34.27	0.39	2.96	400	6.43	34.14	1.40	2.64	26.84	127.6	0.906
814	4.47	34.49	0.49	3.04	500	5.78	34.21	0.60	2.92	26.98	115.3	1.028
1013	3.88	34.60	0.69	3.01	600	5.27	34.27	0.40	2.96	27.09	105.6	1.138
1217	3.33	34.60	1.03	2.89	700	4.84	34.35	0.42	3.00	27.20	95.5	1.239
					800	4.51	34.47	0.48	3.04	27.33	83.5	1.328
					1000	3.91	34.60	0.67	3.02	27.50	68.8	1.480

PAOLINA-T; July 6, 1950; 1542 GCT; 30°09'N, 116°33'W; sounding, 720 fm; wind, 290°, force 2; weather, drizzle; sea, slight; wire angle, 15°. 105.35

0	17.21	33.62E	5.84	0.57	0	17.21	33.62	5.84	0.57	24.43	351.7	0.000
10	-	33.58	6.36	0.56	10	12.19	33.58	6.36	0.56	25.48	251.6	0.030
25	11.07	33.55	4.66	1.39	20	11.35	33.56	5.85	0.64	25.61	239.1	0.055
48	10.25	33.58	4.12	1.57	30	10.85	33.55	4.52	1.44	25.69	231.6	0.078
73	9.86	33.75	3.38	1.80	50	10.22	33.59	4.05	1.58	25.82	218.7	0.123
97	-	33.86	3.07	1.99	75	9.84	33.76	3.34	1.82	26.03	200.5	0.176
151	9.18	34.22	1.56	2.49	100	9.57	33.87	3.02	2.02	26.20	185.1	0.224
200	9.34	34.27	1.09	2.63	150	9.20	34.21	1.59	2.49	26.49	158.3	0.309
249	8.74	34.25	1.35	2.61	200	9.35	34.27	1.09	2.63	26.51	157.2	0.389
299	8.74	34.36	0.81	2.78	250	8.74	34.25	1.35	2.61	26.59	150.3	0.465
354	8.26	34.38	0.67	2.89	300	8.74	34.36	0.81	2.78	26.68	143.1	0.539
403	7.94	34.40	0.59	2.95	400	7.97	34.40	0.60	2.94	26.83	129.9	0.675
453	7.46	34.36	0.44	3.00	500	7.08	34.40	0.45	3.10	26.96	118.7	0.799
503	7.06	34.40	0.45	3.11	600	6.09	34.38	0.39	3.16	27.08	107.9	0.912
608	6.00	34.38	0.39	3.16								

a) Alternate value, 3.15 μg at/L, not used in interpolation.

E Evaporation (see page 236).

S10

CCOFI 5007

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

110.35 PAOLINA-T; July 15, 1950; 1421 GCT; 29°50'N, 116°02'W; sounding, 825 fm; wind, 270°, force 2; weather, overcast; sea, moderate; wire angle, 0°.

0	17.40	33.60E	4.36	0.43	0	17.40	33.60	4.36	0.43	24.36	357.6	0.000
10	17.28	33.57	4.35	0.42	10	17.28	33.57	4.35	0.42	24.37	357.1	0.036
30	14.24	33.57	5.28	0.47	20	15.60	33.57	5.15	0.44	24.76	320.6	0.070
50	11.88	33.60	4.21	0.93	30	14.24	33.57	5.28	0.47	25.05	292.6	0.107
75	10.65	33.71	3.22	1.42	50	11.88	33.60	4.21	0.93	25.55	246.1	0.154
100	9.86	34.01	2.40	1.87	75	10.65	33.71	3.22	1.42	25.85	217.3	0.212
155	10.10	34.42	1.20	2.29	100	9.86	34.01	2.40	1.87	26.22	182.6	0.262
205	10.42	34.64	0.52	2.60	150	10.07	34.39	1.29	2.26	26.48	159.1	0.347
305	8.89	34.51	0.42	2.76	200	10.41	34.63	0.57	2.57	26.61	148.3	0.424
410	8.08	34.51	0.37	2.89	250	9.86	34.57	0.42	2.71	26.66	144.4	0.470
510	7.11	34.51	0.26	2.95	300	8.96	34.51	0.42	2.75	26.76	135.3	0.567
615	6.03	34.50	0.26	3.00	400	8.14	34.51	0.38	2.88	26.89	124.5	0.679
820	4.79	34.52	0.40	3.07	500	7.22	34.51	0.27	2.95	27.02	112.6	0.815
1020	4.11	34.55	0.50	3.05	600	6.16	34.50	0.26	2.99	27.16	100.2	0.922
1225	3.43	34.65	0.72	2.99	700	5.41	34.50	0.28	3.03	27.25	91.7	1.018
					800	4.88	34.52	0.37	3.07	27.33	84.4	1.107
					1000	4.16	34.55	0.50	3.06	27.43	75.4	1.266

110.40 PAOLINA-T; July 15, 1950; 1759 GCT; 29°40'N, 116°22'W; sounding, 1,400 fm; wind, 270°, force 1; weather, overcast; sea, rough; wire angle, 7°.

0	18.17	33.62E	4.56	0.40	0	18.17	33.62	4.56	0.40	24.19	373.7	0.000
10	18.09	33.71	4.76	0.38	10	18.09	33.71	4.76	0.38	24.28	365.6	0.037
30	14.02	33.60	5.41	0.53	20	18.07	33.68	5.23	0.41	24.26	367.7	0.074
49	11.42	33.69	3.76	1.26	30	14.02	33.60	5.41	0.53	25.12	286.3	0.106
74	9.89	33.73	3.15	1.63	50	11.35	33.69	3.76	1.26	25.71	230.2	0.158
99	9.29	33.82	2.27	1.87	75	9.90	33.73	3.15	1.63	26.00	203.4	0.212
153	8.66	34.00	2.30	2.05	100	9.28	33.83	2.27	1.87	26.18	186.9	0.261
203	8.02	34.08	1.94	2.24	150	8.68	33.99	2.30	2.04	26.40	166.7	0.349
301	7.42	34.31	0.96	2.64	200	8.07	34.08	1.99	2.23	26.56	151.8	0.428
405	6.87	34.33	0.42	2.86	250	7.67	34.19	1.42	2.45	26.71	138.7	0.502
504	6.29	34.42	0.29	2.97	300	7.43	34.31	0.97	2.63	26.84	127.1	0.568
607	-	34.42	0.24	3.02	400	6.89	34.33	0.43	2.85	26.93	119.7	0.691
810	4.72	34.56	0.37	3.03	500	6.31	34.42	0.30	2.96	27.08	106.7	0.804
1009	4.16	34.64	0.50	3.03	600	(5.83)	34.42	0.24	3.02	(27.14)	(101.8)	(0.908)
1213	3.56	34.60	0.56	2.95	700	(5.27)	34.46	0.27	3.03	(27.24)	(92.6)	(1.006)
					800	(4.75)	34.55	0.37	3.03	(27.37)	(80.6)	(1.093)
					1000	4.18	34.64	0.49	3.03	27.50	68.9	(1.243)

110.50 PAOLINA-T; July 16, 1950; 0017 GCT; 29°20'N, 117°00'W; sounding, 1,850 fm; wind, 270°, force 1; weather, overcast; sea, slight; wire angle, 12°.

0	18.65	33.64E	4.73	0.45	0	18.65	33.64	4.73	0.45	24.09	383.6	0.000
10	18.25	33.58	4.46	0.44	10	18.25	33.58	4.46	0.44	24.15	378.7	0.038
29	16.65	33.57	4.76	0.44	20	17.30	33.57	4.53	0.44	24.37	357.9	0.075
49	14.22	33.58	4.98	0.48	30	16.61	33.57	4.76	0.44	24.53	342.7	0.110
73	12.25	33.51	4.08	0.92	50	14.15	33.58	4.98	0.48	25.08	290.8	0.173
97	11.29	33.58	3.38	1.30	75	12.17	33.51	4.01	0.97	25.42	258.6	0.242
151	9.61	33.93	2.58	1.98	100	11.16	33.61	3.32	1.33	25.68	234.1	0.304
200	9.15	-	2.03	2.18	150	9.62	33.92	2.59	1.97	26.19	186.4	0.409
297	8.48	34.44	0.76	2.72	200	9.15	34.15	2.03	2.18	26.45	162.7	0.496
397	7.73	34.36	0.43	2.90	250	8.81	34.36	1.30	2.43	26.67	143.1	0.572
491	6.47	34.36	0.49u	2.96	300	8.44	34.44	0.74	2.72	26.79	132.5	0.641
590	5.97a)	34.34	0.29	3.02	400	7.68	34.36	0.43	2.90	26.84	128.7	0.772
784	5.10	34.49	0.29	3.09	500	6.39	34.36	0.31	2.97	27.02	112.1	0.892
974	4.36	34.59	0.44	3.06	600	5.94	34.34	0.29	3.03	27.06	109.1	1.003
1174	3.69	34.63	0.65	3.03	700	5.52	34.41	0.29	3.07	26.17	99.6	1.107
					800	5.03	34.50	0.30	3.09	27.30	87.9	1.201
					1000	4.27	34.60	0.47	3.05	27.46	73.0	1.362

a) Alternate value, 5.81°C, not used in interpolation.

E Evaporation (see page 236).

OBSERVED					INTERPOLATED					COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m

PAOLINA-T; July 16, 1950; 0610 GCT; 28°59'N, 117°41'W; sounding, 2,000 fm; wind, 270°, force 1; weather, overcast; sea, slight; wire angle, 0°. 110.60

0	18.83	33.66E	4.32	0.44	0	18.83	33.66	4.32	0.44	24.06	386.5	0.000
10	18.56	33.63	4.02	0.43	10	18.56	33.63	4.02	0.43	24.11	382.5	0.038
25	17.68	33.60	3.73	0.42	20	18.53	33.61	3.81	0.42	24.10	383.6	0.077
50	14.40	33.49	4.53	0.47	30	16.85	33.57	3.73	0.42	24.47	348.1	0.113
75	12.53	33.51	4.50	0.80	50	14.40	33.49	4.53	0.47	24.96	302.4	0.178
100	10.93	33.60	3.50	1.99	75	12.53	33.51	4.50	0.80	25.35	265.4	0.249
155	10.12	34.23	1.69	2.22	100	10.93	33.60	3.50	1.98	25.72	230.7	0.311
205	10.21	34.42	0.83	2.51	150	10.14	34.17	1.81	2.20	26.30	176.4	0.413
305	9.40	34.61	0.44	2.81	200	10.21	34.40	0.90	2.46	26.47	161.8	0.498
409	8.46	34.56	0.28	2.90	250	9.95	34.54	0.59	2.69	26.62	148.0	0.575
507	7.56	34.58	0.28	2.96	300	9.44	34.61	0.45	2.80	26.76	135.7	0.646
611	6.23	34.36	0.39	3.03	400	8.52	34.57	0.30	2.90	26.88	126.0	0.777
814	5.09	34.47	0.33	3.11	500	7.63	34.58	0.28	2.96	27.02	113.5	0.897
1012	4.36	34.62	0.42	3.09	600	6.35	34.37	0.38	3.03	27.03	112.3	1.010
1216	3.67	34.70	0.71	3.06	700	5.60	34.40	0.40	3.08	27.15	101.3	1.117
					800	5.14	34.46	0.34	3.11	27.25	92.2	1.213
					1000	4.40	34.61	0.41	3.09	27.46	73.9	1.379

PAOLINA-T; July 16, 1950; 1205 GCT; 28°39'N, 118°20'W; sounding, 1,200 fm; wind, 270°, force 1; weather, overcast; sea, slight; wire angle, 0°. 110.70

0	18.62	33.64E		0.41	0	18.62	33.64		0.41	24.10	383.1	0.000
10	18.62	33.55		0.40	10	18.62	33.55		0.40	24.03	389.7	0.039
30	17.04	33.58		0.40	20	18.40	33.57		0.40	24.10	383.3	0.077
50	15.00	33.52		0.43	30	17.04	33.58		0.40	24.43	351.9	0.114
75	12.67	33.49		0.73	50	15.00	33.52		0.43	24.85	312.4	0.180
100	10.99	33.68		1.26	75	12.69	33.49		0.73	25.31	269.2	0.253
155	9.31	34.05		1.97	100	10.99	33.68		1.26	25.76	226.5	0.315
204	9.19	34.35		2.29	150	9.36	34.02		1.92	26.31	175.0	0.416
303	8.40	34.42		2.60	200	9.21	34.34		2.27	26.59	149.9	0.497
408	7.25	34.47		2.79	250	8.94	34.40		2.48	26.68	142.2	0.569
507	6.52	34.52		2.91	300	8.45	34.42		2.59	26.77	134.1	0.639
611	5.70	34.40		2.97	400	7.32	34.47		2.78	26.98	115.4	0.763
815	4.58	34.54		3.03	500	6.58	34.52		2.91	27.12	102.9	0.873
1014	4.04	34.65		3.01	600	5.78	34.41		2.97	27.13	101.9	0.975
1217	3.51	34.66		3.03	700	5.14	34.45		3.01	27.25	91.7	1.072
					800	4.63	34.53		3.03	27.37	80.7	1.158
					1000	4.07	34.64		3.01	27.52	67.7	1.307

PAOLINA-T; July 16, 1950; 1758 GCT; 28°19'N, 118°58'W; sounding, 2,150 fm; wind, 240°, force 1; weather, overcast; sea, slight; wire angle, 0°. 110.80

0	18.39	33.58E	4.38	0.46	0	18.39	33.58	4.38	0.46	24.11	382.0	0.000
10	18.20	33.57	4.35	0.44	10	18.20	33.57	4.35	0.44	24.15	378.3	0.038
25	16.80	33.42	4.53	0.50	20	18.16	33.47	4.45	0.48	24.08	385.0	0.076
50	15.16	33.35	5.10	0.48	30	16.30	33.39	4.68	0.50	24.46	349.0	0.113
75	13.82	33.40	4.69	0.59	50	15.16	33.35	5.10	0.48	24.68	328.5	0.181
100	12.17	33.44	4.60	0.79	75	13.82	33.40	4.69	0.59	25.01	298.0	0.259
154	9.52	33.78	3.11	1.68	100	12.17	33.44	4.60	0.79	25.37	264.5	0.329
203	9.04	34.14	2.10	2.19	150	9.58	33.74	3.27	1.61	26.06	199.1	0.446
301	8.16	34.31	1.87	2.72	200	9.07	34.12	2.10	2.17	26.44	163.8	0.536
403	7.08	34.34	0.92	2.91	250	8.62	34.26	1.98	2.49	26.58	147.6	0.613
501	6.18	34.44	0.52	3.01	300	8.17	34.31	1.88	2.71	26.73	138.1	0.685
603	5.70a)	34.45	0.38	3.08	400	7.12	34.34	0.97	2.90	26.90	122.1	0.815
804	4.54	34.49	0.38	3.13	500	6.19	34.44	0.52	3.01	27.11	103.4	0.928
999	3.96	34.61	0.58	3.15	600	5.71	34.45	0.38	3.08	27.18	98.1	1.029
1199	3.41	34.56	0.71	3.04	700	5.18	34.46	0.37	3.12	27.25	91.5	1.124
					800	4.57	34.49	0.37	3.13	27.34	82.7	1.211
					1000	3.95	34.61	0.59	3.15	27.50	68.4	1.361

a) Alternate value, 5.53°C, not used in interpolation.
E Evaporation (see page 236).

SIO

CCOFI 5007

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

110.90 PAOLINA-T; July 17, 1950; 0004 GCT; 28°00'N, 119°34'W; sounding, 2,150 fm; wind, 240°, force 2; weather, partly cloudy; sea, slight; wire angle, 0°.

0	19.27	33.60E	5.22	0.47	0	19.27	33.60	5.22	0.47	23.90	401.6	0.000
10	-	33.55	4.65	0.46	10	19.29	33.55	4.65	0.46	23.86	405.8	0.040
30	18.44	33.89	4.21	0.43	20	19.16	33.80	4.34	0.44	24.08	384.8	0.080
50	16.23	33.57	4.44	0.46	30	18.44	33.89	4.21	0.43	24.33	361.5	0.117
75	16.43	33.87	4.59	0.41	50	16.23	33.57	4.44	0.46	24.62	334.9	0.187
100	-	33.78	4.13	0.41	75	16.43	33.87	4.59	0.41	24.80	318.4	0.268
155	12.47	33.80	3.79	0.95	100	16.28	33.78	4.13	0.41	24.77	322.1	0.349
204	9.53	33.87	3.36	1.56	150	12.88	33.80	3.81	0.89	25.51	252.3	0.492
302	7.68	34.05	2.42	2.20	200	9.69	33.86	3.40	1.51	26.14	192.8	0.604
404	6.63	34.14	0.89	2.84	250	8.42	33.95	2.91	1.91	26.41	167.4	0.694
502	5.81	34.35	0.52	2.99	300	7.70	34.05	2.44	2.18	26.59	150.3	0.773
605	5.40	34.45	0.37	3.08	400	6.67	34.14	0.94	2.82	26.81	130.8	0.913
806	4.53	34.49	0.39	3.12	500	5.83	34.34	0.52	2.99	27.07	106.4	1.032
1003	3.93	34.51	0.59	3.10	600	5.41	34.45	0.37	3.08	27.21	94.3	1.132
1204	3.44	34.60	0.78	3.05	700	5.00	34.48	0.38	3.12	27.29	87.6	1.223
					800	4.56	34.49	0.39	3.12	27.34	82.7	1.308
					1000	3.93	34.51	0.59	3.10	27.43	75.6	1.466

110.100 PAOLINA-T; July 17, 1950; 0614 GCT; 27°37'N, 120°16'W; sounding, 2,300 fm; wind, 290°, force 2; weather, drizzle; sea, moderate; wire angle, 7°.

0	18.68	33.39E	4.36	0.55	0	18.68	33.39	4.36	0.55	23.90	402.2	0.000
10	18.23	33.38	4.49	0.55	10	18.23	33.38	4.49	0.55	24.00	392.7	0.040
30	16.89	33.28	4.56	0.51	20	17.45	33.32	4.52	0.53	24.14	379.4	0.078
50	16.28	33.60	4.27	0.48	30	16.89	33.28	4.56	0.51	24.24	369.9	0.116
75	16.00	33.69	4.51	0.44	50	16.28	33.60	4.27	0.48	24.63	333.8	0.186
99	15.17	33.57	4.31	0.46	75	16.00	33.69	4.51	0.44	24.76	322.1	0.268
153	12.01	33.71	4.58	0.90	100	15.16	33.57	4.31	0.46	24.85	313.7	0.348
203	9.62	33.85	3.60	1.44	150	12.15	33.70	4.58	0.88	25.57	246.7	0.487
302	7.71	34.09	2.25	2.21	200	9.75	33.84	3.69	1.42	26.11	195.6	0.598
406	6.86	34.23	0.97	2.78	250	8.47	33.97	2.85	1.85	26.42	167.5	0.689
506	5.82	34.27	0.55	3.02	300	7.73	34.08	2.26	2.20	26.61	147.8	0.768
610	5.50a)	34.39	0.29	3.11	400	6.88	34.22	1.03	2.76	26.85	127.2	0.905
814	4.49	34.54	0.50	3.15	500	5.88	34.27	0.56	2.98	27.01	112.0	1.025
1012	3.90	34.61	0.62	3.10	600	5.52	34.37	0.31	3.10	27.14	101.5	1.131
1215	3.39	-	0.75	-	700	5.16	34.48	0.31	3.14	27.27	89.8	1.227
					800	4.58	34.53	0.47	3.15	27.37	79.9	1.312
					1000	3.92	34.61	0.61	3.10	27.51	68.1	1.459

110.110 PAOLINA-T; July 17, 1950; 1210 GCT; 27°16.5'N, 120°54.5'W; sounding, 2,150 fm; wind, 290°, force 2; weather, squally; sea, moderate; wire angle, 8°.

0	18.55	33.33E	4.58	0.49	0	18.55	33.33	4.58	0.49	23.88	403.8	0.000
10	18.43	33.33	3.52r	0.48	10	18.43	33.33	4.62	0.48	23.91	400.9	0.040
30	17.86	33.55	4.67	0.45	20	18.18	33.38	4.65	0.47	24.01	391.8	0.080
50	17.47	33.89	4.68	0.40	30	17.86	33.55	4.67	0.45	24.22	372.3	0.118
75	16.83	33.80	4.83	0.40	50	17.47	33.89	4.68	0.40	24.57	339.2	0.189
99	-	33.98	4.57	0.40	75	16.83	33.80	4.83	0.40	24.65	332.3	0.273
153	13.32	33.84	4.17	0.71	100	16.29	33.98	4.56	0.40	24.92	307.7	0.353
203	9.99	33.84	3.14	1.62	150	14.00	33.84	4.20	0.69	25.31	271.3	0.498
301	8.43	34.18	1.53	2.35	200	10.07	33.84	3.18	1.54	26.06	200.5	0.616
403	7.30	34.27	0.79	2.74	250	9.08	33.88	2.25	2.06	26.25	182.4	0.712
500	6.46	34.27	0.47	2.94	300	8.44	34.18	1.56	2.34	26.59	151.6	0.795
602	5.65b)	34.40	0.37	3.00	400	7.34	34.27	0.78	2.73	26.82	130.5	0.936
802	4.66	34.56	0.42	3.08	500	6.46	34.27	0.47	2.94	26.94	119.6	1.061
998	3.91	34.51	0.48	3.07	600	5.67	34.40	0.37	3.00	27.14	101.1	1.172
1200	3.40	34.58	0.66	3.01	700	5.09	34.52	0.37	3.05	27.31	85.9	1.265
					800	4.67	34.56	0.42	3.08	27.39	78.8	1.347
					1000	3.89	34.51	0.58	3.07	27.43	75.1	1.501

a) Alternate value, 5.35°C, not used in interpolation.
b) Alternate value, 5.48°C, not used in interpolation.
E Evaporation (see page 236).

PAOLINA-T; July 15, 1950; 0731 GCT; 29°12'N, 115°39'W; sounding, 530 fm; wind, 360°, force 2; weather, overcast; sea, moderate; wire angle, 31°. 113.35

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
0	18.01	33.51E	4.74	0.44	0	18.01	33.51	4.74	0.44	24.15	378.1	0.000
9	18.04	33.49	4.49	0.45	10	18.03	33.49	4.48	0.45	24.13	380.2	0.038
21	17.48	33.66	4.34	0.44	20	17.48	33.66	4.35	0.44	24.39	355.4	0.075
43	15.51	33.49	4.53	0.46	30	16.55	33.60	4.36	0.44	24.57	339.2	0.109
64	13.76	33.62	5.46	0.48	50	14.90	33.50	5.02	0.47	24.86	311.7	0.174
85	12.09	33.66	4.22	0.91	75	12.98	33.65	5.15	0.51	25.37	263.5	0.246
130	10.14	33.95	2.23	1.92	100	11.03	33.72	3.04	1.50	25.79	223.5	0.307
170	9.67	34.14	2.01	2.18	150	9.85	34.05	2.08	2.07	26.26	180.6	0.409
248	9.38	34.49	0.96	2.60	200	9.53	34.28	1.80	2.35	26.49	159.3	0.493
331	8.74	34.59	0.53	2.78	250	9.38	34.49	0.94	2.61	26.68	142.5	0.568
414	7.57	34.40	0.64	2.81	300	9.05	34.58	0.58	2.76	26.80	131.6	0.637
508	7.21	34.48	0.31	2.96	400	7.70	34.42	0.62	2.81	26.89	124.5	0.765
600	6.40	34.48	0.26	3.05	500	7.25	34.48	0.35	2.94	27.00	115.3	0.885
701	5.88	34.47	0.26	3.09	600	6.40	34.48	0.26	3.05	27.11	104.9	0.995
800	5.09	34.54	0.30	3.13	700	5.88	34.47	0.26	3.09	27.18	99.1	1.097
					800	4.09	34.54	0.30	3.13	27.32	85.8	1.190

PAOLINA-T; July 15, 1950; 0105 GCT; 28°37'N, 115°16'W; sounding, 120 fm; wind, 320°, force 2; weather, overcast; sea, moderate; wire angle, 3°. 117.35

0	17.90	33.57E	4.21	0.43	0	17.90	33.57	4.21	0.43	24.22	371.1	0.000
10	17.81	33.58	4.35	0.46	10	17.81	33.58	4.35	0.46	24.25	368.6	0.037
25	17.09	33.62	5.00	0.42	20	17.77	33.61	4.91	0.43	24.29	365.6	0.074
50	12.88	33.42	4.47	0.63	30	16.23	33.61	4.98	0.43	24.64	331.7	0.108
75	11.38	33.62	3.62	1.20	50	12.88	33.42	4.47	0.63	25.41	259.5	0.168
100	10.40	33.73	2.72	1.60	75	11.38	33.62	3.62	1.20	25.65	236.9	0.230
155	9.74	34.07	1.59	1.64	100	10.40	33.73	2.72	1.60	25.92	211.8	0.286
					150	9.77	34.03	1.66	1.64	26.25	180.7	0.384

PAOLINA-T; July 14, 1950; 1809 GCT; 28°03'N, 114°54'W; sounding, 48 fm; wind, 360°, force 1; weather, overcast; sea, slight; wire angle, 12°. 120.35

0	18.79	33.55E	5.21	0.48	0	18.79	33.55	5.21	0.48	23.98	393.7	0.000
10	18.67	33.62	4.80	0.49	10	18.67	33.62	4.80	0.49	24.07	386.0	0.039
20	17.89	33.66	5.32	0.49	20	17.89	33.66	5.32	0.49	24.29	365.2	0.076
29	17.77	33.60	5.59	0.43	30	17.76	33.59	5.58	0.43	24.27	367.1	0.113
39	14.99	33.55	5.49	0.47	50	13.17	33.58	5.54	0.61	25.28	271.6	0.177
48	13.32	33.58	5.57	0.56								
58	12.68	33.58	4.82	1.02								
68	12.09	33.71	4.25	1.42								

PAOLINA-T; July 14, 1950; 1150 GCT; 27°43'N, 115°33'W; sounding, 1,100 fm; wind, 320°, force 4; weather, overcast; sea, rough; wire angle, 30°. 120.45

0	18.14	33.75E	5.49	0.37	0	18.14	33.75	5.49	0.37	24.30	363.5	0.000
8	18.06	33.69	4.50	0.35	10	18.06	33.69	4.51	0.35	24.27	366.4	0.036
21	16.30	33.68	5.10	0.42	20	16.30	33.68	5.09	0.41	24.68	327.6	0.071
43	13.17	33.57	4.69	0.77	30	14.96	33.63	5.04	0.57	24.95	303.0	0.103
64	11.13	33.73	3.36	1.41	50	11.35	33.59	4.17	0.95	25.64	237.6	0.157
86	11.23	34.22	1.37	2.30	75	11.16	33.84	2.55	2.07	25.86	216.6	0.214
133	11.26	34.44	0.68	2.52	100	11.25	34.31	1.06	2.39	26.21	183.9	0.264
178	11.55	34.65	0.28	2.69	150	11.35	34.58	0.50	2.59	26.41	166.9	0.351
266	10.45	34.65	0.22	2.76	200	11.39	34.65	0.23	2.71	26.45	163.6	0.433
362	9.18	34.61	0.33	2.83	250	10.67	34.65	0.22	2.75	26.58	152.2	0.513
454	8.46	34.54	0.28	2.90	300	9.95	34.65	0.27	2.78	26.71	141.1	0.586
552	7.32	34.47	0.29	3.02	400	8.84	34.58	0.30	2.85	26.84	130.3	0.722
748	5.47	34.51	0.35	3.13	500	7.98	34.50	0.28	2.95	26.91	124.4	0.849
942	4.52	34.51	0.40	3.12	600	6.79	34.48	0.31	3.06	27.06	110.2	0.966
1141	3.74	34.67	0.70	3.10	700	5.87	34.50	0.34	3.12	27.20	97.5	1.070
					800	5.13	34.51	0.36	3.13	27.29	88.5	1.163
					1000	4.28	34.53	0.46	3.11	27.41	78.3	1.330

E Evaporation (see page 236).

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
120.50	PAOLINA-T; July 14, 1950; 0735 GCT; 27°33'N, 115°52.5'W; sounding, 2,100 fm; wind, 320°, force 4; weather, overcast; sea, rough; wire angle, 11°.											
0	18.48	33.57E	4.85	0.48	0	18.48	33.57	4.85	0.48	24.08	384.8	0.000
10	16.08	33.57	5.67	0.45	10	16.08	33.57	5.67	0.45	24.64	331.1	0.036
25	15.50	33.59	4.85	0.45	20	15.66	33.58	5.46	0.45	24.75	321.1	0.068
55	12.16	33.58	4.32	0.96	30	15.10	33.59	4.72	0.46	24.88	308.8	0.099
79	10.97	33.69	3.38	1.58	50	12.45	33.58	4.38	0.76	25.42	258.2	0.157
108	10.01	33.87	2.64	1.91	75	10.63	33.64	3.56	1.49	25.80	222.2	0.217
162	9.64	34.31	1.37	2.36	100	10.10	33.83	2.85	1.83	26.04	199.8	0.269
216	9.36	34.42	0.97	2.63	150	9.71	34.21	1.58	2.27	26.40	166.6	0.361
324	8.85	34.52	0.34	2.91	200	9.44	34.40	1.07	2.56	26.60	149.1	0.439
437	7.62	34.49	0.29	3.09	250	9.20	34.46	0.77	2.74	26.68	141.7	0.513
545	6.95	34.49	0.22	3.14	300	8.98	34.51	0.47	2.86	26.76	135.7	0.582
654	6.24	34.50	0.25	3.05	400	8.10	34.50	0.27	3.04	26.89	124.8	0.712
866	4.90	34.59	0.42	3.23	500	7.18	34.49	0.26	3.12	27.01	113.4	0.831
1079	4.11	34.55	0.48	3.24	600	6.61	34.49	0.22	3.10	27.09	107.2	0.941
1283	3.47	34.64	0.74	3.13	700	5.92	34.51	0.29	3.06	27.20	97.5	1.044
					800	5.29	34.55	0.37	3.17	27.31	87.5	1.136
					1000	4.35	34.57	0.45	3.24	27.43	76.2	1.300
120.60	PAOLINA-T; July 14, 1950; 0054, 0039 GCT; 27°13'N, 116°31.5'W; sounding, 2,100 fm; wind, 320°, force 5; weather, partly cloudy; sea, rough; wire angle, 21°, 19°.											
0	19.40	33.68E	5.24	0.47	0	19.40	33.68	5.24	0.47	23.93	399.1	0.000
9	19.32	33.64	4.35	0.47	10	19.32	33.62	4.35	0.47	23.85	407.3	0.040
27	17.04	33.53	5.11	0.49	20	18.50	33.56	4.35	0.48	24.04	388.6	0.080
46	15.41	33.48	5.13	0.47	30	16.57	33.53	5.12	0.48	24.51	344.7	0.117
69	14.50	33.46	5.11	0.50	50	15.27	33.47	5.08	0.48	24.75	321.8	0.183
97	13.17	33.60	4.80	0.66	75	14.23	33.46	5.08	0.52	24.97	301.8	0.261
					100	12.89	33.61	4.79	0.68	25.36	265.3	0.332
153	9.70	33.80	3.59	1.46	150	9.77	33.79	3.59	1.36	26.07	198.6	0.448
266	8.86	34.34	1.07	2.57	200	9.24	34.01	2.11	2.18	26.33	174.6	0.542
365	8.04	34.40	0.39	2.86	250	8.94	34.29	1.26	2.49	26.59	150.2	0.623
469	7.07	34.49	0.23	2.89	300	8.64	34.37	0.75	2.69	26.70	140.6	0.696
670	5.62	34.61	0.23	3.04	400	7.68	34.43	0.31	2.88	26.90	123.4	0.827
863	4.67	34.51	0.35	3.09	500	6.82	34.52	0.23	2.90	27.09	106.3	0.942
1063	3.89	34.56	0.44	3.07	600	6.10	34.59	0.23	3.00	27.24	92.7	1.042
					700	5.44	34.61	0.25	3.05	27.34	83.8	1.130
					800	4.93	34.55	0.30	3.08	27.35	82.9	1.213
					1000	4.13	34.53	0.44	3.08	27.42	76.6	1.373
120.70	PAOLINA-T; July 13, 1950; 1825 GCT; 26°55'N, 117°10'W; sounding, 2,100 fm; wind, 300°, force 3; weather, cloudy; sea, rough; wire angle, 18°.											
0	18.91	33.45E	5.26	0.50	0	18.91	33.45	5.26	0.50	23.88	403.6	0.000
10	18.71	33.40	5.28	0.50	10	18.71	33.40	5.28	0.50	23.90	402.5	0.040
28	17.00	33.44	5.21	0.49	20	17.33	33.41	5.23	0.50	24.24	370.1	0.079
47	16.67	33.54	5.47	0.46	30	16.95	33.45	5.22	0.48	24.36	359.1	0.115
71	15.36	33.42	5.36	0.46	50	16.55	33.54	5.47	0.46	24.52	344.1	0.186
100	13.73	33.42	5.54	0.50	75	15.15	33.42	5.36	0.46	24.74	323.5	0.269
147	10.63	33.66	4.07	1.26	100	13.73	33.42	5.54	0.50	25.04	295.5	0.346
195	9.26	33.91	3.34	1.82	150	10.48	33.69	4.01	1.31	25.87	217.5	0.474
290	8.63	34.28	1.07	2.67	200	9.20	33.93	3.27	1.86	26.27	179.9	0.575
389	7.45	34.33	0.72	2.90	250	8.83	34.15	1.77	2.39	26.52	157.4	0.658
483	6.72	34.34	0.37	3.02	300	8.57	34.29	1.01	2.71	26.65	145.4	0.734
582	5.96	34.34	0.31	3.16	400	7.33	34.33	0.69	2.91	26.87	125.9	0.869
776	4.90	34.43	0.40	3.22	500	6.60	34.34	0.35	3.05	26.98	116.5	0.991
968	-	34.47	0.57	3.21	600	5.82	34.34	0.32	3.18	27.07	107.6	1.103
1167	3.55	34.54	0.74	3.16	700	5.22	34.39	0.35	3.22	27.19	97.3	1.205
					800	4.80	34.44	0.43	3.22	27.28	89.4	1.298
					1000	4.08	34.48	0.58	3.21	27.39	79.5	1.467

E Evaporation (see page 236).

SIO
CCOFI 5007

OBSERVED					INTERPOLATED					COMPUTED			
Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m	
PAOLINA-T; July 13, 1950; 1054 GCT; 26°37'N, 117°50'W; sounding, 2,200 fm; wind, 320°, force 3; weather, haze; sea, moderate; wire angle, 33°.													120.80
0	18.78	33.48E	4.52	0.43	0	18.78	33.48	4.52	0.43	23.94	398.4	0.000	
9	18.65	33.49	4.96	0.43	10	18.65	33.49	4.95	0.43	23.98	394.7	0.040	
26	-	33.49	4.69	0.40	20	17.75	33.49	4.75	0.40	24.20	374.1	0.078	
43	16.72	33.54	5.28	0.44	30	17.23	33.50	4.73	0.40	24.33	361.9	0.115	
64	16.02	33.48	5.84	0.45	50	16.48	33.52	5.49	0.44	24.52	344.0	0.185	
89	14.85	33.47	5.44	0.47	75	15.58	33.48	5.75	0.45	24.70	328.3	0.270	
129	13.48	33.67	4.86	0.64	100	14.45	33.49	5.27	0.51	24.95	304.7	0.349	
168	11.25	33.66	4.24	1.10	150	12.35	33.67	4.53	0.81	25.51	252.0	0.488	
241	9.36	34.08	-	2.17	200	10.18	33.74	(3.49)	1.71	25.96	209.5	0.604	
318	8.39	34.21	1.30	2.52	250	9.22	34.11	(2.23)	2.22	26.40	168.0	0.700	
393	7.62	34.29	0.81	2.80	300	8.59	34.19	(1.49)	2.46	26.57	153.1	0.778	
474	6.77a)	34.33	0.48	2.96	400	7.54	34.30	0.78	2.82	26.81	131.2	0.920	
639	5.68	34.43	0.27	3.14	500	6.56	34.35	0.42	3.00	26.99	115.1	1.043	
809	4.81	34.40	0.31	3.18	600	5.90	34.42	0.29	3.11	27.13	102.5	1.152	
994	4.08	34.52	0.54	3.16	700	5.36	34.42	0.27	3.17	27.20	96.8	1.252	
					800	4.86	34.40	0.30	3.18	27.24	93.1	1.347	
					1000	(4.07)	(34.52)	(0.55)	(3.16)	(27.42)	(76.5)	(1.516)	
PAOLINA-T; July 13, 1950; 0333 GCT; 26°19'N, 118°35'W; sounding, 2,300 fm; wind, 320°, force 2; weather, partly cloudy; sea, missing; wire angle, 20°.													120.90
0	19.23	33.57E	4.97	0.48	0	19.23	33.57	4.97	0.48	23.89	402.9	0.000	
10	18.98	33.58	4.52	0.47	10	18.98	33.58	4.52	0.47	23.96	396.1	0.040	
23	-	33.66	4.90	0.45	20	18.47	33.66	4.77	0.45	24.15	378.5	0.079	
47	16.69	33.60	5.21	0.46	30	17.53	33.65	5.06	0.45	24.37	357.6	0.115	
70	16.25	33.77	5.13	0.44	50	16.62	33.60	5.20	0.46	24.55	341.1	0.185	
99	14.64	33.75	5.21	-	75	16.12	33.77	5.15	(0.44)	24.80	318.6	0.268	
146	11.19	33.60	4.36	-	100	14.63	33.75	5.21	(0.55)	25.10	289.8	0.344	
194	10.14	34.04	2.48	2.12	150	11.05	33.60	4.13	(1.06)	25.70	234.0	0.474	
294	9.21	34.36	1.13	2.66	200	10.08	34.07	2.33	2.20	26.23	183.8	0.580	
388	7.64	34.25	0.95	2.84	250	9.60	34.29	1.49	2.52	26.49	160.7	0.665	
484	6.74	34.34	0.50	3.05	300	9.11	34.36	1.11	2.67	26.62	148.6	0.742	
584	6.02	34.40	0.36	3.16	400	7.50	34.26	0.92	2.86	26.79	133.5	0.883	
779	4.96	34.47	0.33	3.19	500	6.61	34.35	0.45	3.08	26.98	116.0	1.008	
1181	3.60	34.58	0.88	3.13	600	5.90	34.41	0.35	3.17	27.12	103.3	1.118	
1383	3.09	34.58	1.06	3.09	700	5.34	34.45	0.33	3.19	27.22	94.3	1.217	
					800	4.88	34.48	0.34	3.19	27.30	87.3	1.307	
					1000	4.21	34.55	0.57	3.18	27.43	76.1	1.470	
PAOLINA-T; July 12, 1950; 2103 GCT; 26°02'N, 119°10'W; sounding, 2,300 fm; wind, 360°, force 2; weather, overcast; sea, rough; wire angle, 12°.													120.100
0	19.47	33.77E	5.72	0.44	0	19.47	33.77	5.72	0.44	23.98	393.8	0.000	
10	-	33.77	4.53	0.45	10	(19.44)	33.77	4.53	0.45	(23.99)	(393.5)	(0.039)	
25	-	33.62	4.92	0.45	20	(19.35)	33.63	4.60	0.45	(23.91)	(401.8)	(0.079)	
53	17.02	33.68	5.11	0.43	30	(17.65)	33.62	4.99	0.45	(24.32)	(362.5)	(0.117)	
78	16.11	33.68	5.22	0.46	50	(17.08)	33.67	5.12	0.43	(24.50)	(346.5)	(0.188)	
107	14.73	33.66	5.04	0.47	75	16.22	33.68	5.22	0.46	24.70	327.4	(0.272)	
160	11.19	33.64	3.82	1.42	100	15.06	33.67	5.12	0.47	24.95	304.1	(0.351)	
213	9.83	34.07	2.02	2.23	150	11.58	33.64	4.13	0.90	25.63	240.3	(0.487)	
320	8.14	34.20	1.40	2.59	200	10.12	33.97	2.25	2.14	26.32	175.9	(0.592)	
430	7.02	34.29	0.84	2.94	250	9.14	34.18	1.74	2.38	26.48	161.5	(0.676)	
536	6.25	34.35	0.31	3.10	300	8.36	34.23	1.48	2.54	26.64	146.8	(0.753)	
643	5.49	34.38	0.33	3.16	400	7.23	34.28	0.98	2.86	26.84	128.2	(0.890)	
840	4.58	34.51	0.11	3.18	500	6.48	34.33	0.40	3.07	26.98	115.5	(1.012)	
1047	3.87	34.52	0.64	3.18	600	5.74	34.37	0.33	3.15	27.11	104.4	(1.122)	
1248	3.43	34.54	0.81	3.12	700	5.12	34.41	0.25	3.17	27.22	94.4	(1.222)	
					800	4.72	34.50	0.11	3.18	27.33	83.9	(1.311)	
					1000	4.00	34.52	0.50	3.18	27.43	75.6	(1.480)	

a) Alternate value, 6.63°C, not used in interpolation.

E Evaporation (see page 236).

SIO

CCOFI 5007

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
120.110	PAOLINA-T; July 12, 1950; 1510 GCT; 25°45'N, 119°43'W; sounding, 900 fm; wind, 320°, force 4; weather, drizzle; sea, rough; wire angle, 28°.											
0	19.14	33.89E	4.72	0.45	0	19.14	33.89	4.72	0.45	24.16	377.4	0.000
9	19.10	33.86	5.01	0.47	10	19.09	33.86	5.05	0.47	24.15	378.4	0.038
26	17.70	33.78	5.28	0.46	20	17.83	33.79	5.23	0.47	24.41	353.9	0.074
48	17.47	33.87	5.17	0.46	30	17.65	33.78	5.27	0.46	24.44	350.9	0.110
70	16.32	33.73	5.23	0.47	50	17.44	33.87	5.17	0.46	24.56	340.2	0.179
80p	15.81	33.68	4.69r	0.53	75	16.05	33.70	5.27	0.51	24.76	322.4	0.262
97	15.34	33.48	5.45	0.53	100	15.20	33.48	5.45	0.53	24.78	320.8	0.342
146	-	33.86	5.03	0.49	150	11.80	33.87	5.00	0.50	25.77	227.0	0.479
200p	10.45	33.96	2.81	1.95	200	10.45	33.96	2.81	1.95	26.08	198.0	0.586
321p	9.00	34.42	0.65	2.79	250	9.75	34.14	1.51	2.52	26.34	174.3	0.678
426p	7.90	34.49	0.41	2.98	300	9.19	34.36	0.83	2.73	26.61	149.8	0.759
527p	6.66	34.45	0.29	3.11	400	8.18	34.49	0.42	2.94	26.87	126.5	0.897
738p	5.30	34.45	0.21	3.15	500	6.96	34.46	0.32	3.07	27.02	112.7	1.017
957p	4.25	34.52	0.57	3.18	600	6.07	34.45	0.27	3.14	27.13	102.5	1.124
1178p	3.66	34.58	0.62	3.16	700	5.48	34.45	0.23	3.15	27.20	96.1	1.224
					800	4.98	34.46	0.31	3.16	27.27	90.0	1.317
					1000	4.08	34.54	0.60	3.18	27.43	75.1	1.482
123.40	PAOLINA-T; July 8, 1950; 2200 GCT; 27°16'N, 114°49'W; sounding, 385 fm; wind, 120°, force 2; weather, cloudy; sea, moderate; wire angle, 15°.											
0	17.26	33.57E	5.33	0.49	0	17.26	33.57	5.33	0.49	24.38	356.2	0.000
10	17.57	33.58	5.38	0.48	10	17.57	33.58	5.38	0.48	24.31	362.9	0.036
30	14.05	33.53	5.72	0.57	20	15.17	33.56	5.63	0.51	24.85	312.0	0.070
48	12.02	33.60	4.22	1.33	30	14.05	33.53	5.72	0.57	25.06	292.0	0.100
72	11.12	33.84	2.83	1.93	50	11.86	33.61	4.08	1.38	25.56	244.8	0.154
96	11.37	34.22	0.94	2.58	75	11.13	33.89	2.71	1.99	25.91	212.4	0.211
149	11.38	34.43	0.27	2.86	100	11.36	34.24	0.65	2.68	26.14	190.9	0.261
197	11.36	34.65	0.29	2.87	150	11.37	34.44	0.27	2.86	26.29	177.4	0.353
244	10.91	34.67	0.27	2.88	200	11.35	34.65	0.30	2.87	26.46	162.7	0.438
290	10.53	34.65	0.20	2.89	250	10.85	34.67	0.27	2.88	26.56	153.8	0.517
340	9.84	34.63	0.17	2.97	300	10.37	34.65	0.19	2.90	26.64	148.2	0.593
386	9.68	34.60	0.23	2.96	400	9.48	34.58	0.25	2.98	26.73	140.4	0.737
432	8.62	34.54	0.25	3.08	500	7.89	34.52			26.93	121.7	0.868
478	8,08	34.52	0.20	3.14								
582	7.03	34.47	-	-								
123.50	PAOLINA-T; July 9, 1950; 0433 GCT; 26°58'N, 115°32'W; sounding, 2,000 fm; wind, 210°, force 1; weather, drizzle; sea, slight; wire angle, 0°.											
0	18.03	33.66E	4.97	0.50	0	18.03	33.66	4.97	0.50	24.25	368.0	0.000
10	-	33.66	4.96	0.48	10	17.46	33.66	4.96	0.48	24.40	354.7	0.036
25	15.61	33.66	5.15	0.49	20	16.46	33.66	5.13	0.49	24.63	332.6	0.071
50	12.29	33.64	3.97	1.26	30	14.67	33.66	5.13	0.52	25.03	294.7	0.102
75	10.58	33.73	3.73	1.49	50	12.29	33.64	3.97	1.26	25.50	250.9	0.156
100	10.29	33.96	2.26	2.10	75	10.58	33.73	3.73	1.49	25.88	214.5	0.215
155	9.97	34.36	1.06	2.53	100	10.29	33.96	2.26	2.10	26.11	193.2	0.266
205	8.88	34.25	1.17	2.59	150	10.00	34.35	1.07	2.51	26.46	160.8	0.354
305	8.72a)	34.49	0.31	2.93	200	8.89	34.25	1.16	2.59	26.57	151.5	0.432
408	7.78	34.51	0.31	3.09	250	8.78	34.35	0.80	2.70	26.67	143.2	0.506
508	6.75	34.44	0.41u	3.15	300	8.73	34.48	0.31	2.91	26.77	134.0	0.575
613	5.88	34.46	0.30	3.19	400	7.96	34.51	0.30	3.08	26.92	121.7	0.702
818	4.88	34.45	0.31	3.24	500	6.82	34.44	0.30	3.14	27.02	112.1	0.819
1017	4.10	34.51	0.47	3.22	600	6.00	34.46	0.30	3.18	27.15	101.0	0.926
1221	3.60	34.54	0.71	3.11b)	700	5.39	34.46	0.30	3.22	27.22	94.2	1.023
					800	4.95	34.45	0.30	3.24	27.27	90.4	1.117
					1000	4.16	34.50	0.45	3.22	27.39	79.0	1.286

a) Alternate value, 8.55°C, not used in interpolation.

b) Alternate value, 3.22 μg at/L, not used in interpolation.

E Evaporation (see page 236).

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
PAOLINA-T; July 9, 1950; 1028 GCT; 26°36'N, 116°06'W; sounding, 2,150 fm; wind, calm; weather, drizzle; sea, slight; wire angle, 0°.													123.60
0	18.96	33.49E	4.23	0.48	0	18.96	33.49	4.23	0.48	23.90	401.8	0.000	
10	18.80	33.51	4.74	0.49	10	18.80	33.51	4.75	0.49	23.95	396.9	0.040	
25	17.28	33.67	4.87	0.47	20	17.72	33.66	4.85	0.48	24.33	361.0	0.078	
50	16.63	33.59	4.86	0.49	30	17.15	33.66	4.88	0.47	24.47	348.3	0.113	
75	15.75	33.57	5.39	0.51	50	16.63	33.59	4.86	0.49	24.54	342.2	0.182	
100	14.00	33.58	4.97	0.60	75	15.75	33.57	5.39	0.51	24.73	325.2	0.266	
155	10.42	33.62	-	1.38	100	14.00	33.58	4.97	0.60	25.11	289.1	0.343	
205	9.74	34.13	1.86	2.31	150	10.56	33.61	2.92	1.23	25.79	224.7	0.471	
305	8.50a)	34.45	1.24	2.70	200	9.80	34.19	1.92	2.24	26.37	170.6	0.570	
408	7.48	34.31	0.62	2.96	250	9.18	34.35	1.50	2.54	26.60	149.5	0.650	
508	6.56	34.40	0.45	3.11	300	8.56	34.45	1.26	2.69	26.78	133.5	0.720	
612	-	34.45	0.32	3.15	400	7.56	34.31	0.67	2.94	26.82	130.6	0.852	
816	4.82	34.48	0.26	3.26	500	6.64	34.39	0.45	3.10	27.01	113.4	0.974	
1016	4.06	34.47	0.60	3.26	600	(5.92)	34.44	0.33	3.15	(27.14)	(101.4)	(1.082)	
1220	3.52	34.54	0.89	3.20	700	(5.36)	34.47	0.27	3.21	(27.23)	(93.2)	(1.179)	
					800	(4.90)	34.48	0.26	3.26	(27.30)	(87.6)	(1.269)	
					1000	4.12	34.47	0.56	3.26	27.37	80.8	(1.438)	
PAOLINA-T; July 10, 1950; 0710 GCT; 26°43.5'N, 114°29.5'W; sounding, 1,900 fm; wind, 360°, force 3; weather, fog; sea, moderate; wire angle, 22°.													127.40
0	17.14	33.66E	5.61	0.56	0	17.14	33.66	5.61	0.56	24.47	347.5	0.000	
10	-	33.66	5.85	0.53	10	17.15	33.66	5.85	0.53	24.47	347.8	0.035	
28	14.22	33.68	5.47	0.89	20	15.05	33.66	5.80	0.60	24.95	302.4	0.067	
46	12.20	33.80	3.29	1.73	30	14.13	33.68	4.60	1.00	25.16	283.6	0.097	
69	11.90	34.04	1.82	2.24	50	12.07	33.84	3.07	1.84	25.70	231.8	0.148	
93	-	34.40	0.81	2.60	75	11.89	34.13	1.52	2.36	25.96	207.9	0.203	
144	11.68	34.63	0.45	2.82	100	11.84	34.48	0.74	2.64	26.24	181.2	0.252	
191	11.16	34.60	0.19	2.94	150	11.64	34.63	0.40	2.84	26.39	168.5	0.339	
286	10.51	34.65	0.20	2.93	200	11.07	34.60	0.18	2.94	26.47	161.7	0.422	
388	9.32	34.61	0.16	3.04	250	10.71	34.63	0.20	2.94	26.56	154.9	0.501	
485	7.92	34.43	0.21	3.12	300	10.42	34.65	0.20	2.94	26.62	149.1	0.576	
588	6.83	34.52	0.20	3.21	400	9.12	34.59	0.17	3.05	26.80	133.9	0.718	
790	5.28	34.54	0.26	3.30	500	7.75	34.43	0.20	3.13	26.88	126.2	0.848	
988	4.44	34.51	0.39	3.28	600	6.71	34.52	0.20	3.22	27.10	106.3	0.964	
1193	3.70	34.56	0.67	3.25	700	5.90	34.54	0.21	3.28	27.22	95.0	1.065	
					800	5.23	34.54	0.27	3.30	27.30	87.6	1.156	
					1000	4.40	34.51	0.41	3.28	27.38	81.2	1.326	
PAOLINA-T; July 10, 1950; 0003 GCT; 26°23.5'N, 115°08'W; sounding, 2,100 fm; wind, 340°, force 1; weather, squally; sea, moderate; wire angle, 7°.													127.50
0	20.16	33.62E	5.43	0.48	0	20.16	33.62	5.43	0.48	23.69	422.0	0.000	
10	17.48	33.66	5.39	0.47	10	17.48	33.66	5.39	0.47	24.40	354.7	0.039	
25	14.82	33.53	5.62	0.57	20	15.55	33.54	5.60	0.53	24.75	321.6	0.073	
50	13.08	33.58	5.05	0.86	30	14.44	33.53	5.60	0.62	24.98	299.9	0.104	
75	11.65	33.75	4.21	1.58	50	13.08	33.58	5.05	0.86	25.30	269.7	0.161	
100	10.68	33.78	3.60	1.87	75	11.65	33.75	4.21	1.58	25.70	231.6	0.223	
154	9.60	33.14	2.88	2.30	100	10.68	33.78	3.60	1.87	25.90	213.1	0.279	
203	9.20	34.31	1.89	2.50	150	9.65	34.11	2.88	2.28	26.34	172.8	0.375	
301	8.39	34.40	1.46	2.90	200	9.23	34.30	1.93	2.49	26.55	153.2	0.457	
404	7.44	34.40	0.52	3.05	250	8.87	34.38	1.60	2.70	26.68	142.3	0.531	
503	6.66	34.43	0.34	3.17	300	8.41	34.40	1.46	2.89	26.76	135.1	0.600	
606	5.92	34.45	0.36	3.24	400	7.48	34.40	0.55	3.04	26.90	122.6	0.729	
808	4.80	34.51	0.68u	3.27	500	6.69	34.43	0.35	3.16	27.04	110.9	0.846	
1005	4.12	34.52	0.62	3.27	600	5.96	34.45	0.36	3.24	27.15	101.2	0.952	
1208	3.61	34.55	0.74	3.25	700	5.34	34.48	(0.45)	3.26	27.24	92.2	1.048	
					800	4.83	34.51	(0.50)	3.27	27.33	84.6	1.136	
					1000	4.13	34.52	(0.62)	3.27	27.41	77.3	1.299	

a) Alternate value, 8.35°C, not used in interpolation.
E Evaporation (see page 236).

SIO

CCOFI 5007

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

127.60 PAOLINA-T; July 9, 1950; 1720 GCT; 25°55'N, 115°42'W; sounding, 2,200 fm; wind, 220°, force 1; weather, partly cloudy; sea, slight; wire angle, 5°.

0	19.45	33.57E	4.62	0.49	0	19.45	33.57	4.62	0.49	23.83	408.1	0.000
10	18.44	33.62	4.83	0.47	10	18.44	33.62	4.83	0.47	24.12	380.7	0.039
25	16.86	33.60	5.95	0.48	20	17.10	33.61	5.90	0.47	24.44	350.5	0.076
50	16.34	33.55	5.59	0.49	30	16.76	33.59	5.91	0.48	24.51	344.5	0.111
75	15.02	33.51	5.36	0.50	50	16.34	33.55	5.59	0.49	24.57	339.1	0.179
100	-	33.55	4.76	0.63	75	15.02	33.51	5.36	0.50	24.84	314.3	0.261
155	10.79	33.86	2.75	1.86	100	13.37	33.55	4.76	0.63	25.22	278.9	0.335
204	10.05	34.18	1.78	2.37	150	10.98	33.83	2.91	1.79	25.89	215.4	0.458
302	9.47	34.49	0.52	2.84	200	10.09	34.14	1.82	2.34	26.29	178.9	0.557
406	8.02	34.43	0.34	2.96	250	9.74	34.39	1.07	2.62	26.54	155.7	0.641
506	7.12	34.46	-	3.11	300	9.49	34.49	0.55	2.83	26.66	145.2	0.716
611	6.15	34.47	0.25	3.15	400	8.14	34.43	0.35	2.96	26.83	130.5	0.853
814	5.02	34.51	0.30	3.18	500	7.17	34.46	0.27	3.10	26.99	115.5	0.977
1014	4.17	34.56	0.49	3.18	600	6.27	34.47	0.25	3.14	27.12	103.9	1.086
1219	3.60	34.57	0.79	3.20	700	5.57	34.48	0.25	3.18	27.22	95.1	1.186
					800	5.08	34.51	0.30	3.18	27.30	87.7	1.277
					1000	4.23	34.56	0.47	3.18	27.43	75.6	1.441

130.35 PAOLINA-T; July 10, 1950; 1315 GCT; 27°17'N, 113°55'W; sounding, 500 fm; wind, 340°, force 2; weather, fog; sea, moderate; wire angle, 17°.

0	16.60	33.73E	5.97	0.53	0	16.60	33.73	5.97	0.53	24.66	329.8	0.000
10	13.77	33.71	5.23	0.64	10	13.77	33.71	5.23	0.64	25.26	272.9	0.030
28	12.37	33.71	3.46	1.52	20	12.82	33.71	3.96	1.33	25.45	254.7	0.057
48	11.92	33.82	3.01	1.81	30	12.27	33.71	3.39	1.56	25.56	244.6	0.081
71	11.88	34.25	1.06	2.56	50	11.91	33.86	2.88	1.86	25.74	227.5	0.129
96	-	34.42	0.13	3.07	75	(11.88)	34.28	0.50	2.64	(26.07)	(196.6)	(0.182)
148	-	34.58	0.14	3.22	100	(11.81)	34.44	0.13	3.09	(26.21)	(184.4)	(0.229)
197	11.25	34.61	0.21	3.05	150	(11.58)	34.58	0.14	3.22	(26.36)	(170.9)	(0.318)
246	10.87	34.67	0.20	3.11	200	11.24	34.61	0.21	3.05	26.46	164.1	(0.402)
295	10.56	34.65	0.20	3.02	250	10.85	34.67	0.20	3.11	26.52	153.8	(0.481)
398	9.51	34.63	0.17	3.04	300	10.52	34.65	0.20	3.02	26.61	150.9	(0.557)
497	8.09	34.54	0.23	3.18	400	9.49	34.63	0.17	3.04	26.77	136.8	(0.701)
601	7.09	34.47	0.19	3.23	500	8.06	34.54	0.22	3.18	26.92	122.9	(0.831)
701	6.07	34.52	0.24	3.31	600	7.10	34.47	0.19	3.23	27.01	115.3	(0.950)
806	5.24	34.49	0.24	3.43	700	6.08	34.52	0.24	3.31	27.19	98.9	(1.057)
					800	5.27	34.49	0.24	3.42	27.26	91.7	(1.152)

130.40 PAOLINA-T; July 10, 1950; 1634 GCT; 26°07'N, 114°11'W; sounding, 1,200 fm; wind, 300°, force 3; weather, partly cloudy; sea, moderate; wire angle, 31°.

0	17.88	33.62E	5.28	0.50	0	17.88	33.62	5.28	0.50	24.26	367.0	0.000
8	17.73	33.63	5.50	0.46	10	17.73	33.63	5.50	0.46	24.31	363.2	0.037
26	15.17	33.64	5.17	0.59	20	15.89	33.64	5.35	0.50	24.75	321.6	0.071
42	12.81	33.62	4.43	1.19	30	14.45	33.63	5.00	0.84	25.05	292.8	0.101
64	11.26	33.79	3.05	1.25	50	12.53	33.63	3.98	1.21	25.44	256.1	0.156
85	11.91	34.31	1.23	2.46	75	12.05	34.05	1.75	1.30	25.86	216.8	0.215
130	11.63	34.56	0.59	2.77	100	11.80	34.45	0.94	2.64	26.22	183.4	0.265
167	11.34	34.61	0.35	2.81	150	11.50	34.59	0.45	2.80	26.38	168.9	0.354
241	10.62	34.67	-	2.92	200	11.04	34.64	(0.26)	2.86	26.51	158.3	0.435
322	9.64	34.61	0.17	3.00	250	10.52	34.67	(0.20)	2.93	26.62	148.3	0.512
402	8.62	34.60	0.15	3.08	300	9.93	34.63	(0.18)	2.98	26.69	142.2	0.584
492	7.74	34.52	0.19	3.10	400	8.70	34.56	0.15	3.08	26.84	129.4	0.720
674	6.15	34.50	0.19	3.24	500	7.69	34.52	0.19	3.10	26.96	118.6	0.844
858	5.03	34.51	0.27	3.34	600	6.78	34.50	0.19	3.16	27.08	108.7	0.958
1056	4.22	34.56	0.52	3.31	700	5.96	34.50	0.20	3.26	27.19	98.7	1.062
					800	5.33	34.51	0.25	3.32	27.27	91.0	1.157
					1000	4.42	34.55	0.44	3.33	27.41	78.5	1.327

E Evaporation (see page 236).

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

PAOLINA-T; July 10, 1950; 2227 GCT; 25°50'N, 114°46'W; sounding, 2,100 fm; wind, 340°, force 3; weather, fog in patches; sea, moderate; wire angle, 35°. 130.50

0	18.56	33.57E	4.99	0.51	0	18.56	33.57	4.99	0.51	24.06	386.8	0.000
8	18.30	33.56	4.84	0.49	10	18.25	33.56	4.85	0.49	24.13	380.0	0.038
20	16.71	33.55	5.07	0.49	20	16.71	33.55	5.07	0.49	24.49	346.2	0.075
45	14.45	33.51	5.30	0.58	30	15.70	33.54	5.23	0.51	24.71	325.1	0.108
63	13.24	33.57	4.71	0.93	50	14.10	33.51	5.28	0.64	25.04	294.9	0.170
90	-	33.69	3.35	1.57	75	11.60	33.61	4.03	1.32	25.61	241.1	0.237
110	10.94	33.80	2.87	1.90	100	11.04	33.74	3.11	1.72	25.81	222.3	0.295
196	11.26	34.65	0.28	2.93	150	11.06	34.20	0.65	2.58	26.16	189.7	0.398
294	9.46	34.52	0.34	2.98	200	11.23	34.65	0.28	2.94	26.48	161.0	0.486
395	8.44	34.51	0.54u	3.07	250	10.28	34.57	0.30	2.97	26.59	151.2	0.564
499	-	34.50	0.24	3.17	300	9.38	34.52	0.35	2.99	26.70	141.1	0.637
706	5.69	34.52	0.24	3.33	400	(8.39)	34.51	0.30	3.08	(26.85)	(128.1)	(0.772)
917	4.60	34.52	0.37	3.36	500	(7.39)	34.50	0.24	3.17	(26.99)	(115.7)	(0.893)
1120	3.88	34.58	0.60	3.33	600	(6.52)	34.52	0.24	3.26	(27.13)	(103.6)	(1.003)
					700	(5.74)	34.52	0.24	3.33	(27.23)	(94.4)	(1.102)
					800	5.16	34.52	0.27	3.35	27.30	88.0	(1.193)
					1000	4.25	34.54	0.45	3.35	27.42	77.2	(1.358)

PAOLINA-T; July 11, 1950; 0457 GCT; 25°29'N, 115°24'W; sounding, 2,100 fm; wind, 320°, force 4; weather, fog; sea, rough; wire angle, 18°. 130.60

0	19.06	33.58E	5.01	0.48	0	19.06	33.58	5.01	0.48	23.94	397.6	0.000
10	19.03	33.57	5.23	0.48	10	19.03	33.57	5.23	0.48	23.94	398.1	0.040
24	16.96	33.60	5.49	0.48	20	17.32	33.60	5.38	0.48	24.38	356.2	0.077
52	15.80	33.49	6.18	0.49	30	16.64	33.60	5.63	0.48	24.54	341.2	0.112
76	14.44	33.49	6.09	0.52	50	15.86	33.49	6.17	0.49	24.64	332.6	0.180
104	12.75	33.58	5.21	0.82	75	14.49	33.49	6.10	0.52	24.94	304.9	0.259
157	10.19	33.71	3.94	1.63	100	13.00	33.55	5.39	0.70	25.29	271.8	0.332
209	10.28	34.34	1.56	2.51	150	10.23	33.70	4.10	1.55	25.92	212.6	0.452
314	8.37	34.38	1.08	2.74	200	10.29	34.33	1.97	2.35	26.40	168.1	0.548
423	7.43	34.38	0.43	3.03	250	9.70	34.36	1.24	2.67	26.52	157.0	0.629
528	6.70	34.45	0.33	3.17	300	8.63	34.38	1.10	2.73	26.71	139.9	0.704
633	5.92	34.45	0.26	3.27	400	7.59	34.38	0.53	2.95	26.87	126.1	0.836
837	4.84	34.49	0.43	3.29	500	6.90	34.44	0.35	3.13	27.01	113.3	0.956
1043	4.11	34.52	0.54	3.28	600	6.17	34.45	0.27	3.24	27.12	103.9	1.064
1244	3.57	34.56	-	3.31	700	5.50	34.46	0.30	3.28	27.21	95.7	1.164
					800	5.00	34.48	0.37	3.29	27.29	88.8	1.257
					1000	4.24	34.52	0.52	3.28	27.40	78.6	1.424

PAOLINA-T; July 11, 1950; 1139 GCT; 25°05'N, 116°10'W; sounding, 2,250 fm; wind, 340°, force 3; weather, drizzle; sea, moderate; wire angle, 21°. 130.70

0	19.58	33.64E	4.70	0.49	0	19.58	33.64	4.70	0.49	23.86	406.0	0.000
9	19.54	33.69	4.62	0.45	10	19.53	33.70	4.62	0.45	23.91	401.8	0.040
23	-	33.75	5.10	0.51	20	19.00	33.75	5.02	0.49	24.09	384.6	0.080
51	17.79	33.77	4.72	0.48	30	18.26	33.76	4.10	0.51	24.28	366.5	0.117
74	14.90	33.68	4.95	0.57	50	17.90	33.77	4.72	0.48	24.37	358.1	0.190
186p	10.20	34.27	1.37	2.46	75	14.62	33.68	4.95	1.27	25.06	293.6	0.271
315p	9.20	34.52	0.43	2.90	100	12.47	33.80	3.55	1.62	25.59	243.5	0.338
439p	7.88	34.45	0.27	3.05	150	10.84	34.12	2.00	2.17	26.14	192.1	0.448
563p	6.88	34.45	0.34	3.15	200	(10.07)	(34.31)	(1.18)	(2.54)	(26.42)	(165.9)	(0.537)
805p	5.10	34.45	0.30	3.25	250	(9.66)	(34.46)	(0.74)	(2.75)	(26.61)	(149.2)	(0.615)
1261p	3.53	34.52	0.93	3.16	300	(9.32)	(34.52)	(0.49)	(2.87)	(26.71)	(140.5)	(0.688)
					400	8.30	34.46	0.30	3.00	26.82	130.8	(0.823)
					500	7.38	34.45	0.30	3.10	26.95	119.3	(0.948)
					600	(6.59)	(34.45)	(0.35)	(3.17)	(27.06)	(109.6)	(1.063)
					700	(5.81)	(34.45)	(0.31)	(3.22)	(27.16)	(100.5)	(1.167)
					800	(5.13)	(34.45)	(0.30)	(3.25)	(27.25)	(92.8)	(1.264)
					1000	4.24	34.47	0.48	3.24	27.36	82.3	(1.440)

E Evaporation (see page 236).

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5007
5008

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

130.80 PAOLINA-T; July 11, 1950; 1726 GCT; 24°47'N, 116°48'W; sounding, 2,150 fm; wind, 340°, force 4; weather, cloudy; sea, very rough; wire angle, 14°.

0	20.19	33.91E	4.33	0.47	0	20.19	33.91	4.33	0.47	23.90	401.8	0.000
10	20.07	33.93	4.59	0.47	10	20.07	33.93	4.59	0.47	23.95	397.5	0.040
24	-	33.75	4.65	0.48	20	(18.25)	33.85	4.63	0.48	(24.35)	(359.4)	(0.078)
53	16.29	33.64	4.87	0.51	30	(17.53)	33.72	4.67	0.48	(24.43)	(352.5)	(0.113)
78	14.78	33.57	5.43	0.56	50	(16.45)	33.65	4.83	0.50	(24.63)	(334.0)	(0.182)
106	13.07	33.64	4.31	0.94	75	15.02	33.57	5.39	0.56	24.89	309.7	(0.263)
160	10.71	33.93	2.45	2.06	100	13.45	33.61	4.85	0.78	25.25	276.1	(0.336)
213	9.79	34.27	1.62	2.45	150	11.03	33.88	2.70	1.94	25.92	212.8	(0.458)
320	8.90	34.47	-	2.95	200	9.98	34.20	1.80	2.38	26.35	172.3	(0.555)
431	8.04	34.52	0.24	3.14	250	9.44	34.37	(1.17)	2.66	26.57	152.4	(0.635)
538	6.89	34.52	0.24	3.19	300	9.05	34.45	(0.72)	2.88	26.70	141.2	(0.709)
645	5.84	34.45	0.26	3.23	400	8.29	34.51	(0.28)	3.12	26.87	126.9	(0.842)
855	4.65a)	34.49	0.41	3.34	500	7.35	34.52	0.24	3.18	27.01	113.7	(0.963)
1066	4.00	34.56	0.57	3.34	600	6.25	34.48	0.25	3.21	27.13	102.8	(1.071)
1269	3.49	34.60	0.81	3.25	700	5.44	34.45	0.28	3.25	27.21	95.7	(1.170)
					800	4.89	34.47	0.37	3.32	27.29	88.2	(1.262)
					1000	4.18	34.54	0.51	3.34	27.42	76.4	(1.427)

20.10 BLACK DOUGLAS; August 19, 1950; 0535 GCT; 46°10.5'N, 124°49'W; sounding, 520 fm; wind, 320°, force 2; weather, overcast; sea, slight; wire angle, 8°.

0	17.00	32.07	5.23	0	17.00	32.07	5.23	23.29	459.6	0.000
10	16.99	32.03	5.37	10	16.99	32.03	5.37	23.26	462.8	0.046
25	15.02	32.03	6.27	20	16.90	32.03	6.22	23.28	460.9	0.092
50	8.74	32.54	5.46	30	13.75	32.08	6.27	24.01	392.0	0.135
74	6.89	32.63	5.68	50	8.74	32.54	5.46	25.25	273.3	0.202
98	6.54	32.84	5.35	75	6.80	32.63	5.68	25.60	240.3	0.266
151	7.44	33.69	3.27	100	6.55	32.87	5.21	25.82	219.7	0.323
199	7.10	33.93	2.33	150	7.46	33.68	3.35	26.34	171.9	0.421
290	6.30	34.09	1.46	200	7.11	33.93	2.32	26.58	149.3	0.501
387	5.81	34.14	0.85	250	6.64	34.03	1.83	26.73	136.3	0.572
479	5.40	34.14	0.77	300	6.24	34.10	1.36	26.83	126.6	0.638
576	4.97	34.16	0.51	400	5.75	34.14	0.84	26.93	118.7	0.761
668	4.64	34.29	0.46	500	5.32	34.14	0.73	26.98	114.6	0.878
764	4.22	34.31	0.44	600	4.89	34.18	0.48	27.06	107.4	0.989
854	4.04	34.42	0.43	700	4.50	34.30	0.45	27.20	94.9	1.090
				800	4.13	34.36	0.43	27.29	87.0	1.181
				1000	(3.90)	(34.46)	(0.43)	(27.39)	(78.6)	(1.346)

20.20 BLACK DOUGLAS; August 18, 1950; 2244 GCT; 45°50.5'N, 125°38.5'W; sounding, 1,150 fm; wind, 320°, force 2; weather, overcast; sea, slight; wire angle, 16°.

0	17.17	31.76	3.89	0	17.17	31.76	3.89	23.01	486.2	0.000
10	16.65	31.80	3.86	10	16.65	31.80	3.86	23.20	468.6	0.048
24	10.63	32.50	4.68	20	11.75	32.48	4.10	24.70	325.5	0.087
47	8.23	32.59	4.95	30	10.00	32.52	4.81	25.04	293.5	0.118
71	7.52	32.88	3.75	50	8.04	32.61	4.92	25.42	258.0	0.174
93	7.33	33.42	3.01	75	7.47	32.98	3.60	25.79	223.0	0.234
142	6.95	33.95	1.88	100	7.25	33.57	2.74	26.28	176.5	0.284
186	6.78	34.04	1.44	150	6.90	33.97	1.80	26.64	142.8	0.363
274	6.48	34.09	1.11	200	6.72	34.05	1.36	26.73	135.2	0.432
366	6.33	34.11	1.07	250	6.55	34.08	1.14	26.78	131.4	0.499
455	5.97	34.13	0.92	300	6.43	34.10	1.09	26.81	129.1	0.564
548	5.63	34.16	0.55	400	6.17	34.12	1.04	26.86	125.6	0.691
730	4.76	34.25	0.31	500	5.78	34.14	0.70	26.92	120.3	0.814
914	4.02	34.34	0.26	600	5.38	34.18	0.44	27.00	113.5	0.931
1110	3.49	34.40	0.36	700	4.89	34.23	0.32	27.10	104.8	1.041
				800	4.48	34.28	0.29	27.18	97.1	1.142
				1000	3.73	34.37	0.30	27.33	83.2	1.323

a) Alternate value, 4.48°C, not used in interpolation.

E Evaporation (see page 236).

BLACK DOUGLAS; August 18, 1950; 1607 GCT; 45°31'N, 126°28'W; sounding, 1,480 fm; wind, 280°, force 1; weather, clear; sea, slight; wire angle, 9°. 20.30

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
0	17.31	31.46	4.78		0	17.31	31.46	4.78		22.75	511.5	0.000
10	16.47	31.53	4.78		10	16.47	31.53	4.78		23.05	482.9	0.050
25	11.62	32.48	5.48		20	13.25	32.48	4.98		24.42	352.9	0.092
49	8.91	32.49	5.63		30	10.65	32.48	5.50		24.90	307.0	0.125
73	7.62	32.59	5.77		50	8.80	32.49	5.64		25.21	277.7	0.183
97	7.39	33.04	3.89		75	7.58	32.63	5.77		25.50	250.5	0.249
150	7.30	33.80	2.33		100	7.40	33.15	3.50		25.93	209.7	0.307
198	6.73	33.89	2.48		150	7.30	33.80	2.33		26.45	160.9	0.399
293	5.94	33.96	1.47		200	6.67	33.89	2.47		26.61	146.4	0.476
394	5.42	34.02	1.16		250	6.23	33.94	2.09		26.71	137.7	0.547
489	5.12	34.14	0.53		300	5.92	33.97	1.42		26.77	132.2	0.614
589	4.78	34.20	0.39		400	5.41	34.03	1.14		26.88	122.7	0.742
786	4.16	34.31	0.29		500	5.10	34.15	0.48		27.01	111.1	0.859
980	3.69	34.39	0.43		600	4.74	34.21	0.38		27.10	103.4	0.966
1184	3.22	34.42	0.44		700	4.39	34.32	0.29		27.23	92.1	1.063
					800	4.12	34.32	0.32		27.26	89.8	1.155
					1000	3.65	34.39	0.43		27.36	80.8	1.326

BLACK DOUGLAS; August 18, 1950; 1008 GCT; 45°10.5'N, 127°16.5'W; sounding, 1,555 fm; wind, 280°, force 1; weather, clear; sea, moderate; wire angle, 12°. 20.40

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
0	17.92	31.32	4.77		0	17.92	31.32	4.77		22.50	535.1	0.000
10	17.43	31.71	4.46		10	17.43	31.71	4.46		22.92	495.8	0.052
25	16.36	31.89	4.07		20	16.75	31.89	4.20		23.21	467.8	0.100
49	10.65	32.57	5.30		30	15.90	32.05	4.07		23.53	438.0	0.145
73	8.55	32.59	4.84		50	10.60	32.58	5.30		24.98	300.0	0.219
97	7.31u	32.57	4.77		75	8.30	32.59	4.83		25.36	263.5	0.289
149	7.42	33.45	4.13		100	7.70	32.57	4.75		25.43	257.0	0.354
196	7.33	33.85	2.42		150	7.42	33.45	4.10		26.16	188.4	0.465
290	6.27	34.04	1.51		200	7.29	33.87	2.30		26.51	156.2	0.552
389	5.82	34.06	1.04		250	6.58	33.98	1.77		26.69	139.3	0.625
482	5.13	34.08	0.89		300	6.25	34.05	1.45		26.79	130.5	0.693
581	4.81	34.18	0.53		400	5.73	34.06	1.00		26.87	124.4	0.820
774	4.06	34.27	0.38		500	5.10	34.10	0.84		26.97	114.8	0.940
965	3.62	34.34	0.38		600	4.74	34.20	0.50		27.09	104.2	1.050
1165	3.17	34.42	0.51		700	4.31	34.25	0.40		27.18	96.3	1.149
					800	4.00	34.28	0.38		27.24	91.4	1.244
					1000	3.52	34.36	0.40		27.35	81.5	1.417

BLACK DOUGLAS; August 18, 1950; 0412 GCT; 44°50.5'N, 128°06'W; sounding, 1,500 fm; wind, 280°, force 2; weather, overcast; sea, moderate; wire angle, missing. 20.50

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
0	18.55	30.52	5.44		0	18.55	30.52	5.44		21.74	608.0	0.000
10	17.96	30.57	4.63		10	17.96	30.57	4.63		21.92	590.7	0.060
25	15.62	32.36	5.67		20	16.40	32.20	5.55		23.53	437.5	0.111
50	11.38	32.48	5.86		30	14.70	32.41	5.75		24.06	386.7	0.153
74	8.60	32.54	5.32		50	11.38	32.48	5.86		24.77	319.7	0.223
98	7.25	32.76	5.39		75	8.59	32.54	5.32		25.28	271.5	0.297
152	6.98	33.69	3.01		100	7.23	32.80	5.38		25.68	233.5	0.360
201	6.88	33.91	2.98		150	6.99	33.66	3.00		26.39	167.0	0.460
298	5.54	33.98	1.91		200	6.89	33.91	2.98		26.60	147.6	0.539
400	5.24	34.05	1.78		250	6.28	33.95	2.42		26.71	137.6	0.610
497	4.76	34.11	1.15		300	5.52	33.98	1.90		26.83	126.6	0.676
599	4.34	34.20	0.82		400	5.24	34.05	1.78		26.92	119.1	0.799
799	3.90	34.31	0.76		500	4.75	34.11	1.12		27.02	109.9	0.914
994	3.41	34.42	0.36		600	4.33	34.20	0.80		27.14	99.5	1.018
1196	3.02	34.50	0.51		700	4.12	34.27	0.78		27.22	92.7	1.114
					800	3.89	34.31	0.75		27.27	88.0	1.205
					1000	3.38	34.42	0.36		27.41	75.5	1.368

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

20.60 BLACK DOUGLAS; August 17, 1950; 2143 GCT; 44°30.5'N, 128°53.5'W; sounding, 1,500 fm; wind, 280°, force 1; weather, fog; sea, moderate; wire angle, 6°.

0	17.56	32.56	4.99	0	17.56	32.56	4.99	23.53	436.7	0.000
10	17.01	32.64u	5.34	10	17.01	32.56	5.34	23.66	424.4	0.043
25	16.66	32.57	5.43	20	16.75	32.57	5.41	23.73	418.2	0.085
50	10.43	32.63	5.86	30	16.47	32.58	5.48	23.80	411.6	0.127
74	8.42	32.63	5.49	50	10.43	32.63	5.86	25.05	292.5	0.197
98	7.43	32.57	5.47	75	8.30	32.63	5.48	25.39	260.5	0.266
151	7.28	33.40	5.04	100	7.42	32.57	5.45	25.47	253.2	0.330
199	7.23	33.82	2.97	150	7.29	33.40	5.05	26.14	190.4	0.442
296	6.43	33.96	1.81	200	7.21	33.83	2.96	26.49	158.1	0.528
397	5.76	34.04	1.29	250	7.00	33.91	2.08	26.58	150.1	0.605
493	5.10	34.08	0.74	300	6.36	33.96	1.79	26.71	138.6	0.678
594	4.58	34.16	0.42	400	5.74	34.04	1.27	26.85	126.0	0.810
792	4.02	34.25	0.32	500	5.05	34.08	0.70	26.96	115.7	0.931
986	3.53	34.38	0.35	600	4.54	34.16	0.40	27.08	104.8	1.041
1187	3.09	34.44	0.49	700	4.24	34.21	0.32	27.16	98.5	1.143
				800	4.00	34.26	0.32	27.22	92.9	1.239
				1000	3.49	34.39	0.35	27.37	79.0	1.410

20.70 BLACK DOUGLAS; August 17, 1950, 1546 GCT; 44°10.5'N, 129°42.5'W; sounding, 1,400 fm; wind, calm; weather, cloudy; sea, moderate; wire angle, 7°.

0	17.45	32.55	3.93	0	17.45	32.55	3.93	23.55	434.7	0.000
10	16.45	32.48	3.88	10	16.45	32.48	3.88	23.73	417.9	0.043
25	15.71	32.48	4.76	20	15.95	32.47	4.65	23.84	408.1	0.084
50	9.68	32.56	3.99	30	15.45	32.50	4.65	23.97	395.6	0.124
74	8.16	32.61	4.24	50	9.68	32.56	3.99	25.14	284.2	0.192
98	7.31u	32.75	4.77	75	8.07	32.62	4.25	25.42	258.0	0.260
151	7.16	33.48	4.12	100	7.48	32.79	4.77	25.64	237.6	0.322
199	6.98	33.75	2.90	150	7.17	33.48	4.13	26.22	182.7	0.427
295	6.57	33.97	1.68	200	6.97	33.75	2.89	26.46	160.9	0.513
395	5.97	34.02	0.95	250	6.77	33.92	2.14	26.62	146.2	0.589
490	5.24	34.09	0.60	300	6.53	33.97	1.65	26.69	140.1	0.661
591	4.74	34.16	0.56	400	5.92	34.02	0.93	26.81	129.8	0.796
786	4.12	34.27	0.28	500	5.17	34.10	0.59	26.96	115.7	0.919
978	3.56	34.51r	0.25	600	4.69	34.17	0.55	27.07	105.8	1.030
1177	3.21	34.40	0.47	700	4.35	34.23	0.40	27.16	98.3	1.132
				800	4.09	34.28	0.27	27.23	92.4	1.227
				1000	3.50	34.37	0.25	27.36	80.6	1.400

20.80 BLACK DOUGLAS; August 17, 1950; 0806, 0906 GCT; 43°50.5'N, 130°30'W; sounding, 1,600 fm; wind, 100°, force 1; weather, clear; sea, moderate; wire angle, 13°, 20°.

0	17.71	32.66	5.12	0	17.71	32.66	5.12	23.58	432.4	0.000
10	17.53	32.66	5.53	10	17.53	32.66	5.53	23.62	428.1	0.043
25	16.57	32.68	5.59	20	16.95	32.67	5.59	23.76	415.3	0.085
49	10.11	32.67	6.66	30	15.15	32.68	5.65	24.17	376.2	0.125
73	8.96	32.71	5.41	50	10.00	32.67	6.65	25.16	282.8	0.191
96	8.51r	32.66	6.04	75	8.85	32.71	5.43	25.38	261.8	0.259
149	6.83	32.63	5.71	100	7.93	32.65	6.04	25.46	254.5	0.323
195	6.82	33.43	4.12	150	6.81	32.63	5.70	25.60	241.3	0.448
289	6.32	33.83	4.18r	200	6.82	33.51	(4.02)	26.29	176.7	0.552
388	5.42	33.91	2.11	250	6.56	33.76	(3.30)	26.52	155.4	0.634
				300	6.20	33.84	(2.85)	26.63	145.4	0.710
464	4.63	33.96	1.59	400	5.30	33.92	2.02	26.81	129.5	0.847
561	4.31	34.05	0.96	500	4.47	33.99	1.33	26.96	115.6	0.969
756	3.85	34.16	0.40	600	4.22	34.08	0.82	27.05	107.1	1.081
952	3.39	34.30	0.36	700	3.98	34.13	0.52	27.12	101.4	1.185
1155	3.13	34.42	0.42	800	3.74	34.19	0.37	27.19	95.1	1.283
				1000	3.30	34.33	0.36	27.34	81.3	1.460

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

BLACK DOUGLAS; August 16, 1950; 2359 GCT; 43°30.5'N, 131°18'W; sounding, 1,900 fm; wind, 160°, force 3; weather, cloudy; sea, rough; wire angle, 0°. 20.90

0	17.93	32.63	4.76	0	17.93	32.63	4.76	23.50	439.8	0.000
10	17.83	32.61	4.09	10	17.83	32.61	4.09	23.51	439.3	0.044
25	17.14	32.61	4.73	20	17.59	32.61	4.50	23.56	434.1	0.088
50	9.94	32.65	5.07	30	14.25	32.62	4.80	24.32	362.3	0.127
74	-	32.74	4.73	50	9.94	32.66	5.07	25.16	282.4	0.192
98	8.58	32.68	5.52	75	9.20	32.74	4.73	25.34	265.6	0.260
151	7.41	32.88	5.31	100	8.53	32.68	5.52	25.40	260.5	0.326
200	7.56u	33.64	3.95	150	7.43	32.89	5.32	25.72	230.2	0.449
298	6.50	33.96	1.29u	200	7.09	33.65	3.95	26.37	169.8	0.549
400	5.87	34.04	0.39u	250	6.78	33.87	(3.10)	26.58	150.1	0.629
498	4.80	34.02	1.20	300	6.48	33.97	(2.60)	26.70	139.4	0.702
600	4.45	34.11	0.73	400	5.87	34.04	(1.85)	26.83	127.5	0.834
800	4.04	34.24	0.37	500	4.78	34.02	1.19	26.95	117.0	0.956
997	3.48	34.33	0.38	600	4.45	34.11	0.73	27.05	107.4	1.069
1199	3.03	34.43	0.43	700	4.27	34.18	0.49	27.13	101.1	1.173
				800	4.04	34.24	0.37	27.20	94.8	1.271
				1000	3.47	34.33	0.38	27.33	83.2	1.450

BLACK DOUGLAS; August 19, 1950; 1245 GCT; 45°25.5'N, 124°47'W; sounding, 400 fm; wind, 330°, force 3; weather, overcast; sea, moderate; wire angle, 21°. 23.15

0	16.06	31.82	4.43	0	16.06	31.82	4.43	23.31	457.4	0.000
9	16.04	31.83	4.61	10	16.04	31.83	4.61	23.33	456.5	0.046
23	-	32.18	4.28	20	15.50	32.13	4.43	23.68	423.4	0.090
46	7.50	32.56	4.26	30	12.00	32.31	4.25	24.52	342.7	0.128
70	-	33.06	3.63	50	7.43	32.63	4.23	25.52	248.1	0.187
92	7.20	33.43	2.70	75	7.24	33.15	3.30	25.95	207.2	0.244
136p	7.32	33.78	2.33	100	7.20	33.52	2.57	26.25	179.5	0.292
142	7.28	33.82	2.29	150	7.22	33.85	2.22	26.50	156.0	0.376
177p	7.09u	33.93u	1.83	200	6.71	33.98	1.76	26.68	140.3	0.450
186	6.80	33.98u	1.74	250	6.48	34.04	1.86	26.75	133.5	0.519
230p	6.55	34.02	1.92	300	6.23	34.09	1.43	26.83	127.2	0.583
284p	6.32	34.08	1.55	400	5.76	34.11	0.81	26.90	121.1	0.708
354p	5.91	34.11	1.01							
412p	5.75	34.11	0.76							

BLACK DOUGLAS; August 19, 1950; 1054 GCT; 44°40'N, 124°45'W; sounding, 90 fm; wind, 330°, force 3; weather, overcast; sea, moderate; wire angle, 13°. 27.20

0	16.75	31.62	6.16	0	16.75	31.62	6.16	23.00	486.9	0.000
10	15.88	31.67	6.87	10	15.88	31.67	6.87	23.24	464.6	0.048
24	9.68	32.50	6.11	20	12.00	32.38	6.12	24.58	337.3	0.088
48	7.47	32.65	5.74	30	8.75	32.55	6.03	25.26	272.2	0.118
73	7.22u	33.08	4.67	50	7.45	32.66	5.68	25.54	246.2	0.170
97	7.30	33.48	3.52	75	7.34	33.09	4.60	25.89	213.0	0.227
				100	(7.30)	(33.50)	(3.45)	(26.23)	(180.8)	(0.277)

BLACK DOUGLAS; August 13, 1950; 2246 GCT; 43°54.5'N, 124°49.5'W; sounding, 120 fm; wind, 200°, force 3; weather, overcast; sea, moderate; wire angle, 17°. 30.26

0	14.28	32.40	4.99	0	14.28	32.40	4.98	24.14	378.2	0.000
10	11.54	32.51	5.27	10	11.54	32.50	5.27	24.76	320.1	0.035
24	8.45	32.54	4.85	20	9.00	32.53	4.98	25.21	277.2	0.065
48	7.90	32.75	4.01	30	8.26	32.58	4.65	25.36	262.9	0.092
71	7.32	33.22	3.24	50	7.82	32.76	3.90	25.56	243.7	0.142
95	7.26	33.77	1.78r	75	7.31	33.35	3.07	26.10	193.4	0.197
143	7.21	33.91	1.72	100	7.25	33.80	2.47	26.46	159.3	0.241

S10

CCOFI 5008

OBSERVED					INTERPOLATED					COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m
30.30	BLACK DOUGLAS; August 14, 1950; 0144 GCT; 43°46.5'N, 125°08.5'W; sounding, 820 fm; wind, 180°, force 3; weather, fog; sea, very rough; wire angle, 19°.											
0	16.13	32.09	5.14		0	16.13	32.09	5.14		23.51	438.9	0.000
9	15.30	32.43	5.52		10	15.25	32.44	5.50		23.97	395.2	0.042
23	9.50	32.75	5.29		20	11.75	32.68	5.35		24.86	310.7	0.077
47	8.42	33.08	4.43		30	8.72	32.85	5.08		25.50	249.5	0.105
71	8.38	33.35	4.49u		50	8.42	33.11	4.37		25.75	226.2	0.153
94	8.15	33.49	3.84		75	8.36	33.37	4.03		25.96	206.4	0.207
145	7.05	33.75	3.01		100	8.05	33.53	3.74		26.13	190.5	0.256
191	6.84	33.87	2.72		150	7.02	33.76	2.97		26.46	160.0	0.344
238	6.68	34.02	1.81		200	6.81	33.91	2.58		26.61	146.8	0.421
284	6.44	34.02	1.59		250	6.62	34.02	1.72		26.72	136.8	0.491
381	5.84	34.07	1.33		300	6.34	34.02	1.54		26.76	133.9	0.559
474	5.39	34.14	0.64		400	5.75	34.08	1.22		26.88	123.2	0.687
571	5.02	34.22	0.62		500	5.33	34.16	0.65		26.99	113.2	0.805
665	4.59	34.23	0.38		600	4.88	34.23	0.56		27.10	103.6	0.915
766	4.40	34.37	0.25		700	4.48	34.37	0.32		27.18	96.9	1.014
30.40	BLACK DOUGLAS; August 14, 1950; 0851 GCT; 43°26.5'N, 125°56'W; sounding, 1,720 fm; wind, 200°, force 3; weather, overcast; sea, moderate; wire angle, 1°.											
0	17.74	30.81	4.43		0	17.74	30.81	4.43		22.15	568.4	0.000
10	17.12	31.00	4.75		10	17.12	31.00	4.75		22.47	538.0	0.055
25	11.64	32.47	5.29		20	14.00	31.70	5.20		23.66	424.6	0.103
50	8.74	32.52	4.81u		30	11.15	32.50	5.31		24.83	313.9	0.140
75	7.40	32.56	4.90		50	8.74	32.52	5.23		25.24	274.8	0.199
100	7.05	32.99	4.13		75	7.40	32.56	4.90		25.47	253.3	0.265
153	7.05	33.68	3.11		100	7.05	32.99	4.13		25.85	216.9	0.324
202	7.05	33.91	2.19		150	7.05	33.66	3.17		26.38	167.7	0.420
299	6.44	33.98	1.40		200	7.05	33.91	2.22		26.58	149.9	0.499
400	5.84	34.11	0.90		250	6.83	33.94	1.70		26.63	145.6	0.571
497	5.34	34.14	0.69		300	6.43	33.98	1.37		26.71	138.1	0.644
599	4.93	34.20	0.39		400	5.84	34.11	0.90		26.89	122.2	0.774
798	4.28	34.31	0.35		500	5.33	34.14	0.67		26.78	114.8	0.893
994	3.76	34.40	0.43		600	4.92	34.20	0.39		27.07	106.4	1.004
1197	3.20	34.43	0.41		700	4.59	34.26	0.37		27.16	98.9	1.106
					800	4.27	34.31	0.35		27.23	92.4	1.202
					1000	3.75	34.40	0.42		27.36	81.3	1.375
30.50	BLACK DOUGLAS; August 14, 1950; 1735 GCT; 43°06.5'N, 126°43.5°W; sounding, 2,010 fm; wind, 200°, force 4; weather, cloudy; sea, very rough; wire angle, 19°.											
0	14.03	32.90	4.50		0	14.03	32.90	4.50		24.58	336.4	0.000
10	13.77	32.92	4.58		10	13.77	32.92	4.58		24.65	329.9	0.033
24	7.94	33.04	5.12		20	9.00	32.97	4.90		25.55	244.5	0.062
47	7.51	33.19	3.92		30	7.75	33.06	4.90		25.81	220.1	0.085
70	8.14	33.58	3.31		50	7.52	33.23	3.85		25.97	204.8	0.128
93	7.46	33.62	3.16		75	8.00	33.60	3.27		26.20	184.2	0.176
141	7.27	33.80	2.07		100	7.40	33.63	3.02		26.31	174.0	0.221
163p	7.18	33.93	1.70		150	7.24	33.86	1.89		26.51	155.5	0.303
184	7.12	33.97	1.59		200	6.99	33.97	1.56		26.63	144.7	0.379
271	6.47	33.96	1.40		250	6.60	33.96	1.45		26.68	141.0	0.450
362	5.98	34.01	0.96		300	6.34	33.97	1.26		26.72	137.6	0.520
474p	5.30	34.11	0.56		400	5.70	34.04	0.77		26.85	125.5	0.652
779p	4.34	34.34	0.30		500	(5.21)	(34.13)	(0.51)		(26.98)	(114.0)	(0.771)
977p	3.74	34.39	0.35		600	(4.90)	(34.21)	(0.37)		(27.08)	(105.3)	(0.881)
					700	(4.60)	(34.29)	(0.32)		(27.18)	(96.8)	(0.982)
					800	4.29	34.35	0.30		27.26	89.6	(1.075)
					1000	(3.69)	(34.40)	(0.35)		(27.36)	(80.6)	(1.245)

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	µg at/L	m	°C	‰	ml/L	µg at/L	g/L	$10^5 cm^3/g$	dyn. m

BLACK DOUGLAS; August 15, 1950; 0130 GCT; 42°46.5'N, 127°30.5'W; sounding, 1,560 fm; wind, 200°, force 6; weather, overcast; sea, high; wire angle, 25°. 30.60

0	17.50	32.59	5.37	0	17.50	32.59	5.37	23.57	432.9	0.000
9	17.48	32.59	5.30	10	17.45	32.59	5.30	23.58	432.1	0.043
22	17.15	32.57	5.69	20	17.22	32.57	5.55	23.62	428.6	0.086
45	10.48	32.57	6.71	30	14.25	32.57	6.07	24.28	365.9	0.126
68	8.88	32.63	5.60	50	10.10	32.58	6.68	25.07	291.0	0.192
90	7.84	32.59	5.81	75	8.52	32.63	5.66	25.36	263.7	0.261
138	7.43	33.39	4.31	100	7.67	32.58	5.63	25.44	255.8	0.326
182	7.35	33.87	2.54	150	7.40	33.68	3.78	26.35	171.1	0.433
267	6.20	33.95	2.60	200	7.15	33.90	2.55	26.55	152.1	0.513
358	5.47	33.94	1.70	250	6.40	33.95	2.62	26.69	139.4	0.586
444	4.84	34.02	1.32	300	5.90	33.95	2.30	26.76	133.7	0.654
534	4.37	34.06	1.29r	400	5.17	33.97	1.45	26.86	124.3	0.784
710	4.22	34.30	0.36	500	4.51	34.05	(1.01)	27.00	111.6	0.902
887	3.79	34.38	0.35	600	4.33	34.16	(0.58)	27.11	102.3	1.009
1085	3.38	34.43	0.51	700	4.25	34.30	(0.38)	27.23	91.9	1.106
				800	4.03	34.35	0.35	27.29	86.6	1.195
				1000	3.50	34.41	0.44	27.39	77.6	1.359

BLACK DOUGLAS; August 15, 1950; 0902 GCT; 42°26.5'N, 128°17'W; sounding, 1,730 fm; wind, 220°, force 5; weather, overcast; sea, high; wire angle, 20°. 30.70

0	18.11	32.05	2.41r	0	18.11	32.05		23.01	486.0	0.000
10	18.09	32.06	4.39r	10	18.09	32.06		23.02	485.4	0.049
24	16.10	32.57	5.60	20	17.05	32.55		23.65	426.3	0.094
51	10.27	32.66	5.41	30	15.00	32.59	5.58	24.14	379.6	0.134
74	8.07	32.75	5.33	50	10.50	32.66	5.42	25.06	291.6	0.202
100	8.41	32.69	4.96	75	8.08	32.75	5.32	25.52	248.5	0.269
149	8.48	33.78	1.73u	100	8.41	32.69	4.96	25.42	258.0	0.332
199	8.13	33.89	2.00	150	8.47	33.78	3.25	26.27	178.9	0.442
298	7.55	33.96	1.67	200	8.11	33.89	1.99	26.41	166.3	0.528
402	6.95	34.00	1.54	250	7.77	33.94	1.74	26.50	158.6	0.609
503	6.05	34.10	1.03	300	7.53	33.96	1.65	26.55	154.2	0.688
605	5.29	34.16	0.63	400	6.96	34.02	1.56	26.67	143.6	0.836
810	4.34	34.28	0.43	500	6.07	34.10	1.06	26.85	127.1	0.971
1019	3.78	34.36	0.36	600	5.32	34.16	0.62	26.99	114.2	1.092
1255	3.18	34.43	0.43	700	4.77	34.22	0.53	27.11	104.1	1.201
				800	4.37	34.27	0.44	27.19	96.5	1.301
				1000	3.82	34.35	0.37	27.31	85.8	1.484

BLACK DOUGLAS; August 15, 1950; 1657 GCT; 42°06.5'N, 129°04'W; sounding, 1,780 fm; wind, 220°, force 2; weather, partly cloudy; sea, very rough; wire angle, 4°. 30.80

0	17.83	32.07	3.76	0	17.83	32.07	3.76	23.09	478.3	0.000
10	17.69	32.11	4.21	10	17.69	32.11	4.21	23.17	471.6	0.048
25	16.74	32.36	3.99	20	17.10	32.29	4.02	23.44	446.4	0.093
50	14.30	32.66	4.43	30	16.15	32.41	4.01	23.75	417.0	0.137
75	10.82	32.72	5.32	50	14.30	32.66	4.43	24.34	360.9	0.214
99	9.18	32.66	4.60	75	10.82	32.72	5.32	25.05	293.2	0.296
152	7.76	33.30	3.55	100	9.10	32.66	4.57	25.29	270.4	0.367
200	7.39	33.73	2.84	150	7.78	33.28	3.59	25.98	206.1	0.485
295	6.50	34.00	2.19	200	7.39	33.73	2.84	26.39	167.9	0.579
395	5.40	33.98	1.48	250	6.94	33.97	2.49	26.64	144.8	0.657
491	4.90	34.07	0.88	300	6.47	34.00	2.14	26.72	137.0	0.727
591	4.66	34.22	0.57	400	5.35	33.98	1.45	26.85	125.7	0.859
790	4.02	34.31	0.29	500	4.88	34.08	0.85	26.98	113.7	0.978
988	3.51	34.40	0.28	600	4.63	34.23	0.55	27.13	100.6	1.085
1192	3.06	34.43	0.46	700	4.30	34.28	0.42	27.20	94.0	1.183
				800	4.01	34.32	0.28	27.27	88.5	1.274
				1000	3.48	34.41	0.29	27.39	77.4	1.441

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

30.90 BLACK DOUGLAS; August 15, 1950; 2335 GCT; 41°47'N, 129°50'W; sounding, 1,780 fm; wind, 170°, force 3; weather, overcast; sea, rough; wire angle, 15°.

0	18.34	32.50	4.06	0	18.34	32.50	4.06	23.30	458.8	0.000
10	17.98	32.54	4.44	10	17.98	32.54	4.44	23.42	447.9	0.045
24	18.41r	32.61	4.59	20	17.10	32.60	4.57	23.67	423.7	0.089
48	11.64	32.63	4.50	30	15.00	32.62	4.60	24.16	377.4	0.129
72	9.33	32.61	3.95	50	11.25	32.63	4.47	24.91	306.4	0.197
96	8.41	32.83	4.31r	75	9.15	32.61	3.87	25.25	274.5	0.270
148	7.51	33.40	2.81	100	8.27	32.95	3.31	25.65	236.7	0.334
195	7.26	33.82	2.59	150	7.49	33.40	2.80	26.11	193.1	0.442
288	6.33	33.96	1.47	200	7.23	33.84	2.50	26.50	157.6	0.529
386	5.43	34.05	1.03	250	6.85	33.93	1.78	26.62	146.6	0.605
480	4.94	34.07	0.67	300	6.17	33.97	1.41	26.74	135.4	0.676
578	4.56	34.16	0.47	400	5.32	34.06	0.95	26.92	119.4	0.803
773	3.85	34.25	0.27	500	4.88	34.08	0.60	26.98	113.7	0.920
967	3.52	34.40	0.25	600	4.48	34.18	0.44	27.11	102.6	1.028
1171	3.10	34.43	0.46	700	4.10	34.22	0.35	27.18	96.1	1.127
				800	3.78	34.27	0.25	27.25	89.6	1.220
				1000	3.48	34.41	0.27	27.39	77.4	1.387

30.100 BLACK DOUGLAS; August 16, 1950; 0618 GCT; 41°27'N, 130°36'W; sounding, 1,790 fm; wind, 180°, force 3; weather, clear; sea, very rough; wire angle, missing.

0	18.77	32.76	4.77	0	18.77	32.76	4.77	23.39	450.3	0.000
10	18.75	32.77	5.17	10	18.75	32.77	5.17	23.40	449.2	0.045
25	18.31	32.80	4.73	20	18.50	32.79	4.85	23.48	442.1	0.090
50	12.50	32.95	5.12	30	17.75	32.84	4.74	23.70	421.3	0.133
75	10.73	32.88	6.01	50	12.50	32.95	5.12	24.92	305.0	0.205
99	9.67	32.79	5.23	75	10.73	32.88	6.01	25.19	279.7	0.278
152	8.03	33.07	4.73	100	9.60	32.78	5.21	25.31	269.2	0.347
200	7.52	33.62	3.62	150	8.01	33.05	4.76	25.76	226.7	0.471
294	6.69	33.93	2.49	200	7.52	33.62	3.62	26.28	178.0	0.572
393	5.87	33.96	1.67	250	7.05	33.86	2.92	26.54	154.4	0.655
488	5.11	34.05	1.16	300	6.62	33.93	2.42	26.65	144.2	0.729
587	4.56	34.15	0.71	400	5.82	33.96	1.63	26.78	133.0	0.868
784	4.02	34.27	-	500	5.00	34.06	1.10	26.95	116.6	0.993
978	3.43	34.36	0.35	600	4.53	34.16	(0.68)	27.08	104.6	1.104
1193	3.09	34.45	0.57	700	4.25	34.22	(0.53)	27.16	97.9	1.205
				800	3.97	34.28	(0.45)	27.24	91.1	1.299
				1000	3.39	34.37	0.35	27.37	79.3	1.470

33.32 BLACK DOUGLAS; August 13, 1950; 1643 GCT; 43°07.5'N, 124°53'W; sounding, 235 fm; wind, 150°, force 1; weather, cloudy; sea, slight; wire angle, 0°.

0	14.52	32.43	6.14	0	14.52	32.43	6.14	24.12	380.8	0.000
10	13.78	32.48	5.93	10	13.78	32.48	5.93	24.31	362.8	0.037
25	7.85	32.63	5.67	20	8.50	32.61	5.80	25.35	264.0	0.069
50	8.05	32.63	5.32	30	7.85	32.63	5.60	25.46	253.5	0.094
75	7.26	32.96	3.62u	50	8.05	32.63	5.32	25.43	256.5	0.145
99	7.67	33.44	4.07	75	7.26	32.96	4.74	25.80	221.6	0.205
151	7.61	33.82	2.75	100	7.67	33.43	4.04	26.11	192.6	0.257
198	7.08	33.96	2.13	150	7.63	33.81	2.77	26.42	164.6	0.346
245	6.87	33.99	1.83	200	7.07	33.96	2.10	26.61	146.5	0.424
292	6.72	34.05	1.43	250	6.85	34.00	1.79	26.67	141.4	0.496

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
BLACK DOUGLAS; August 12, 1950; 0833 GCT; 42°20'N, 124°56.5'W; sounding, 660 fm; wind, 340°, force 1; weather, clear; sea, moderate; wire angle, 1°.													37.38
0	10.67	33.50	4.47		0	10.67	33.50	4.47		25.69	231.5	0.000	
10	10.51	33.54	4.51		10	10.51	33.54	4.51		25.74	226.1	0.023	
25	10.11	33.60	4.28		20	10.27	33.57	4.35		25.81	220.0	0.045	
50	8.94	33.63	4.34		30	9.94	33.61	4.28		25.90	212.0	0.067	
75	8.10	33.66	2.81		50	8.86	33.63	4.34		26.09	194.0	0.107	
99	7.85	33.78	2.73		75	8.10	33.66	2.81		26.23	181.4	0.154	
153	7.52	33.93	1.89		100	7.84	33.79	2.72		26.37	168.2	0.198	
202	6.86	34.00	1.67		150	7.55	33.92	1.90		26.51	155.3	0.279	
299	6.53	34.06	1.02		200	6.87	34.00	1.68		26.67	140.9	0.353	
403	6.03	34.13	0.77		250	6.71	34.03	1.32		26.72	137.3	0.422	
501	5.41	34.14	0.71		300	6.52	34.06	1.01		26.76	133.5	0.490	
605	5.00	34.23	0.56		400	6.05	34.13	0.78		26.88	123.3	0.619	
703	4.69	34.25	0.40		500	5.43	34.14	0.71		26.97	116.1	0.739	
808	4.37	34.33	0.33		600	5.03	34.23	0.57		27.08	105.6	0.850	
1006	3.83	34.42	0.50		700	4.70	34.25	0.41		27.14	100.9	0.953	
					800	4.39	34.32	0.33		27.23	93.4	1.050	
					1000	3.84	34.42	0.49		27.36	80.9	1.224	
BLACK DOUGLAS; August 12, 1950; 0054 GCT; 41°33'N, 125°00'W; sounding, 720 fm; wind, 340°, force 3; weather, partly cloudy; sea, moderate; wire angle, 5°.													40.45
0	11.29	33.64	3.57r		0	11.29	33.64	(5.55)		25.69	231.5	0.000	
10	11.05	33.64	5.46		10	11.05	33.64	5.46		25.73	227.6	0.023	
25	10.64	33.62	4.98		20	10.75	33.63	5.15		25.77	223.5	0.046	
49	9.34	33.75	3.01u		30	10.45	33.62	4.80		25.82	219.4	0.068	
73	8.01	33.68	3.39		50	9.20	33.75	3.90		26.13	190.3	0.109	
98	7.84	33.69	3.24		75	8.00	33.68	3.38		26.25	178.6	0.154	
150	7.41	33.98	2.26		100	7.83	33.69	3.22		26.29	175.6	0.199	
197	7.10	34.02	1.93		150	7.41	33.98	2.26		26.58	149.1	0.280	
292	6.11	34.05	1.67		200	7.08	34.02	1.92		26.66	142.2	0.353	
392	5.74	34.11	1.09		250	6.48	34.03	1.84		26.75	134.2	0.422	
487	5.09	34.13	0.77		300	6.08	34.06	1.64		26.82	127.6	0.488	
587	5.00	34.22	0.51		400	5.70	34.11	1.05		26.91	120.3	0.612	
786	4.36	34.40	0.50		500	5.09	34.14	0.74		27.01	111.8	0.728	
983	3.75	34.40	0.60		600	4.98	34.24	0.51		27.10	104.1	0.836	
1187	3.30	34.49	0.58		700	4.68	34.36	0.51		27.23	92.6	0.934	
					800	4.32	34.40	0.50		27.30	86.4	1.023	
					1000	3.72	34.51	0.59		27.37	80.2	1.190	
BLACK DOUGLAS; August 12, 1950; 1828 GCT; 41°23'N, 125°23'W; sounding, 1,690 fm; wind, 340°, force 4; weather, cloudy; sea, very rough; wire angle, 18°.													40.50
0	13.51	33.17	6.35		0	13.51	33.17	6.35		24.89	306.9	0.000	
9	13.40	33.19	5.47		10	13.40	33.19	5.42		24.93	303.3	0.030	
24	12.68	33.31	4.99		20	13.00	33.27	4.99		25.07	290.1	0.060	
47	10.16	33.55	5.08		30	11.25	33.39	5.01		25.50	249.9	0.087	
71	8.84	33.69	3.60		50	9.95	33.57	5.07		25.87	215.4	0.134	
95	7.99	33.80	2.92		75	8.65	33.71	3.45		26.18	185.4	0.184	
147	7.45	33.88	2.26		100	7.94	33.81	2.78		26.37	168.1	0.228	
195	7.11	33.91	2.06		150	7.43	33.88	2.24		26.50	156.6	0.309	
290	6.20	34.00	1.65		200	7.06	33.91	2.04		26.57	150.1	0.386	
390	5.75	34.05	1.09		250	6.54	33.96	1.83		26.68	140.2	0.458	
485	5.04	34.14	0.54		300	6.16	34.01	1.60		26.77	132.3	0.527	
585	4.80	34.20	0.48		400	5.65	34.06	1.01		26.88	123.4	0.655	
780	4.24	34.40	0.35		500	5.00	34.15	0.53		27.02	109.9	0.771	
972	3.73	34.42	0.45		600	4.76	34.21	0.47		27.10	103.6	0.878	
1173	3.24	34.48	0.61		700	4.48	34.35	0.38		27.24	90.9	0.975	
					800	4.20	34.40	0.35		27.31	84.8	1.063	
					1000	3.66	34.43	0.45		27.39	78.0	1.226	

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

40.60 BLACK DOUGLAS; August 12, 1950; 1030 GCT; 41°03'N, 126°09'W; sounding, 1,680 fm; wind, 340°, force 3; weather, cloudy; sea, moderate; wire angle, 19°.

0	14.49	32.90	5.59	0	14.49	32.90	5.59	24.48	346.0	0.000
10	14.48	32.90	4.21r	10	14.48	32.90	5.26	24.49	345.6	0.035
24	13.06	33.13	4.84	20	13.50	33.07	4.99	24.82	314.3	0.068
47	9.12	33.30	4.38	30	11.30	33.17	4.72	25.32	267.0	0.097
71	8.56	33.49	3.86	50	9.00	33.33	4.33	25.83	218.4	0.145
94	7.93	33.62	3.11	75	8.48	33.51	3.78	26.05	197.8	0.197
145	7.37	33.87	1.91	100	7.83	33.66	2.92	26.27	177.7	0.244
191	6.95	34.04	1.26	150	7.34	33.89	1.80	26.52	154.6	0.327
280	6.20	34.11	0.85	200	6.88	34.05	1.16	26.71	137.3	0.401
373	5.65	34.13	2.27r	250	6.42	34.10	0.91	26.81	128.3	0.466
462	5.15	34.16	0.67	300	6.07	34.11	0.84	26.86	123.7	0.530
557	4.79	34.20	0.43	400	5.48	34.14	0.75	26.96	115.4	0.649
744	4.24	34.34	0.32	500	5.00	34.17	0.57	27.04	108.4	0.761
934	3.70	34.40	0.43	600	4.66	34.24	0.38	27.13	100.2	0.865
1136	3.26	34.42	0.47	700	4.38	34.32	0.33	27.23	92.0	0.961
				800	4.09	34.36	0.33	27.29	86.5	1.051
				1000	3.54	34.41	0.42	27.39	78.1	1.215

40.70 BLACK DOUGLAS; August 12, 1950; 0330 GCT; 40°42'N, 126°55'W; sounding, 1,680 fm; wind, 360°, force 3; weather, cloudy; sea, rough; wire angle, 15°.

0	16.76	32.03	5.14	0	16.76	32.03	5.14	23.32	457.2	0.000
10	16.70	32.05	4.19r	10	16.70	32.05	5.12	23.35	454.7	0.046
24	14.95	32.21	5.10	20	15.50	32.10	5.11	23.65	425.6	0.090
48	10.72	32.61	4.99	30	13.75	32.42	5.07	24.27	367.1	0.129
71	9.22	32.61	5.06	50	10.25	32.61	5.00	25.07	291.2	0.195
95	8.56	32.63	4.81	75	9.09	32.61	5.03	25.26	273.6	0.266
145	7.42	33.17	3.90	100	8.35	32.64	4.74	25.39	260.9	0.333
189	7.27	33.69	3.28	150	7.40	33.22	3.84	25.98	205.3	0.449
277	6.55	33.95	1.99	200	7.20	33.77	3.12	26.44	162.4	0.541
370	5.80	34.02	1.11	250	6.77	33.92	2.36	26.62	146.2	0.618
490p	5.06	34.13	0.67	300	6.37	33.97	1.73	26.71	138.0	0.689
722p	4.32	34.25	0.38	400	5.59	34.05	0.95	26.87	123.4	0.819
936p	3.72	34.40	0.35	500	(5.05)	(34.13)	(0.66)	(27.00)	(112.0)	(0.938)
				600	(4.71)	(34.19)	(0.49)	(27.09)	(104.5)	(1.046)
				700	(4.39)	(34.24)	(0.39)	(27.16)	(98.0)	(1.147)
				800	4.10	34.30	0.35	27.24	91.1	(1.242)
				1000	(3.54)	(34.41)		(27.39)	(78.1)	(1.411)

40.80 BLACK DOUGLAS; August 11, 1950; 2054 GCT; 40°23'N, 127°40'W; sounding, 900 fm; wind, 360°, force 3; weather, cloudy; sea, rough; wire angle, 3°.

0	17.57	32.10	4.11	0	17.57	32.10	4.11	23.18	470.2	0.000
10	17.17	32.12	4.24	10	17.17	32.12	4.24	23.28	460.7	0.047
25	16.34	32.30	5.00	20	16.60	32.23	4.80	23.51	439.7	0.092
50	15.11	32.50	4.99	30	16.15	32.32	5.00	23.68	423.6	0.135
74	12.24	32.70	6.00r	50	15.11	32.50	4.97	24.05	388.8	0.216
98	9.73	32.89	4.36	75	12.08	32.70	4.68	24.81	316.4	0.304
151	8.33	33.31	3.69	100	9.50	32.91	4.33	25.43	258.1	0.376
198	7.91	33.73	2.56	150	8.35	33.30	3.70	25.91	212.7	0.493
292	6.76	33.96	1.66	200	7.87	33.74	2.53	26.33	174.0	0.591
391	6.08	34.03	1.04	250	7.18	33.89	2.03	26.54	154.0	0.672
485	5.20	34.05	1.12	300	6.71	33.97	1.59	26.67	142.4	0.746
584	4.89	34.16	0.46	400	6.00	34.03	1.03	26.81	130.1	0.882
778	4.16	34.31	0.34	500	5.12	34.06	1.07	26.94	118.1	1.006
970	3.62	34.40	0.51	600	4.83	34.17	0.43	27.06	107.5	1.119
1172	3.12	34.49	0.52	700	4.43	34.26	0.34	27.17	97.0	1.221
				800	4.10	34.32	0.35	27.26	89.6	1.315
				1000	3.55	34.42	0.43	27.39	77.4	1.482

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

BLACK DOUGLAS; August 11, 1950; 1418 GCT; 40°02'N, 128°25'W; sounding, 2,460 fm; wind, 340°, force 2; weather, partly cloudy; sea, moderate; wire angle, 10°. 40.90

0	17.18	32.27	4.54	0	17.18	32.27	4.54	23.41	448.3	0.000
10	17.14	32.29	4.60	10	17.14	32.29	4.60	23.43	447.0	0.045
25	16.15	32.30	4.88	20	16.62	32.30	4.80	23.55	435.0	0.089
49	12.94	32.57	4.81	30	15.50	32.32	4.87	23.82	409.8	0.131
73	11.04	32.61	5.06	50	12.75	32.58	4.82	24.59	336.9	0.206
97	8.91	32.63	5.03	75	10.75	32.61	5.06	24.98	299.9	0.285
155	8.43	33.21	3.44	100	8.89	32.63	5.01	25.30	269.5	0.356
197	7.59	33.67	3.84u	150	8.50	33.14	3.50	25.76	226.8	0.480
292	6.85	33.96	1.88	200	7.56	33.69	2.75	26.33	173.3	0.581
392	5.90	34.02	1.30	250	7.09	33.87	2.25	26.54	154.2	0.662
488	5.02	34.09	1.05	300	6.78	33.97	1.80	26.66	143.4	0.736
589	4.86	34.23	0.56	400	5.78	34.02	1.27	26.83	128.0	0.872
788	4.16	34.36	0.32	500	5.01	34.11	0.98	26.99	113.0	0.993
986	3.66	34.36	0.36	600	4.83	34.24	0.51	27.11	102.3	1.100
1190	3.12	34.51	0.64	700	4.47	34.32	0.34	27.22	93.0	1.198
				800	4.13	34.36	0.32	27.29	87.0	1.288
				1000	3.62	34.36	0.37	27.34	82.7	1.457

BLACK DOUGLAS; August 11, 1950; 0638 GCT; 39°42'N, 129°10'W; sounding, 2,500 fm; wind, 330°, force 2; weather, clear; sea, moderate; wire angle, 14°. 40.100

0	18.38	32.77	3.86	0	18.38	32.77	3.86	23.49	440.4	0.000
10	17.07	32.80	3.44	10	17.07	32.80	3.44	23.85	406.6	0.042
24	16.54	32.85	3.54	20	16.62	32.84	3.50	23.97	395.6	0.082
48	12.31	32.72	4.75	30	16.31	32.84	3.66	24.04	389.1	0.122
73	9.42	32.77	4.45	50	11.95	32.72	4.75	24.85	312.0	0.192
96	9.02	33.03	4.57	75	9.35	32.78	4.47	25.35	264.9	0.264
148	7.85	33.42	3.44	100	8.94	33.07	4.50	25.64	237.6	0.327
195	7.49	33.84	2.54	150	7.83	33.44	3.36	26.10	194.9	0.435
285	6.55	33.96	1.78	200	7.42	33.85	2.50	26.48	159.5	0.523
380	5.78	34.00	1.09	250	6.90	33.93	2.07	26.61	147.2	0.600
472	5.26	34.13	0.68	300	6.42	33.97	1.66	26.71	138.6	0.672
569	4.79	34.16	0.49	400	5.66	34.03	0.97	26.85	125.8	0.804
760	4.08	34.31	0.34	500	5.12	34.14	0.62	27.00	112.1	0.923
953	3.59	34.38	0.40	600	4.66	34.19	0.44	27.09	103.9	1.031
1155	3.16	34.43	0.54	700	4.27	34.27	0.34	27.20	94.4	1.130
				800	3.97	34.33	0.35	27.28	87.3	1.221
				1000	3.47	34.39	0.40	27.38	78.7	1.387

BLACK DOUGLAS; August 11, 1950; 0018 GCT; 39°23'N, 129°55'W; sounding, 2,450 fm; wind, 320°, force 2; weather, partly cloudy; sea, moderate; wire angle, 5°. 40.110

0	18.40	32.72	3.67	0	18.40	32.72	3.67	23.45	444.2	0.000
10	17.63	32.68	4.49	10	17.63	32.68	4.49	23.61	429.4	0.044
25	16.59	32.70	4.69	20	16.65	32.69	4.57	23.85	407.2	0.085
50	12.93	32.69	4.75	30	16.60	32.70	4.70	23.87	405.7	0.126
74	10.69	32.73	4.42	50	12.93	32.69	4.75	24.64	332.1	0.200
98	8.78	32.75	4.49	75	10.40	32.73	4.42	25.14	285.3	0.277
152	8.08	33.48	3.11	100	8.75	32.77	4.47	25.43	257.1	0.345
200	7.69	33.76	2.71	150	8.10	33.46	3.13	26.07	197.2	0.458
296	6.73	33.98	1.65	200	7.69	33.76	2.71	26.37	170.1	0.550
398	5.95	34.06	1.09	250	7.18	33.90	2.13	26.55	153.3	0.631
494	5.15	34.09	-	300	6.70	33.99	1.61	26.69	140.8	0.705
595	4.71	34.16	0.43	400	5.93	34.06	1.08	26.84	126.9	0.838
794	4.16	34.31	0.26	500	5.12	34.09	0.70	26.96	115.8	0.959
989	3.58	34.38	0.40	600	4.70	34.17	0.40	27.07	105.9	1.070
1191	3.18	34.47	0.69	700	4.45	34.27	0.26	27.18	96.5	1.171
				800	4.15	34.31	0.26	27.24	90.9	1.265
				1000	3.55	34.38	0.40	27.36	80.4	1.437

S10

CCOFI 5008

OBSERVED					INTERPOLATED					COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m
40.120	BLACK DOUGLAS; August 10, 1950; 1715 GCT; 39°03'N, 130°39'W; sounding, 2,420 fm; wind, 320°, force 1; weather, partly cloudy; sea, moderate; wire angle, 0°.											
0	18.49	32.81	2.98r		0	18.49	32.81	(4.66)		23.50	440.0	0.000
10	17.90	32.84	4.64		10	17.90	32.84	4.64		23.66	424.4	0.043
25	17.37	32.83	4.45		20	17.55	32.83	4.50		23.74	417.2	0.085
50	13.23	32.94	4.97		30	17.05	32.83	4.47		23.86	406.2	0.126
75	11.09	32.94	4.62		50	13.23	32.94	4.97		24.77	319.4	0.199
99	10.37	32.84	4.69		75	11.09	32.94	4.62		25.18	281.5	0.274
153	8.97	32.97	4.42		100	10.35	32.84	4.68		25.23	276.8	0.344
201	7.61	33.44	3.97		150	9.08	32.94	4.45		25.52	250.3	0.475
298	6.69	33.94	2.42		200	7.63	33.42	3.99		26.11	194.3	0.587
399	5.73	33.98	1.38		250	7.04	33.78	3.32		26.47	160.3	0.676
495	4.96	34.04	0.99		300	6.67	33.94	2.38		26.65	144.1	0.751
597	4.56	34.13	0.60		400	5.72	33.98	1.37		26.80	130.2	0.889
796	3.98	34.29	0.34		500	4.95	34.04	0.97		26.94	117.5	1.012
991	3.51	34.40	0.52		600	4.55	34.13	0.59		27.06	107.1	1.125
1194	3.10	34.46	0.62		700	4.22	34.21	0.37		27.16	98.3	1.227
					800	3.96	34.29	0.34		27.25	90.2	1.322
					1000	4.50	34.40	0.52		27.38	78.3	1.490
43.50	BLACK DOUGLAS; August 7, 1950; 0529 GCT; 40°48'N, 124°57'W; sounding, 1,545 fm; wind, 350°, force 2; weather, fog; sea, moderate; wire angle, 0°.											
0	11.73	32.89	5.99		0	11.73	32.89	5.99		25.02	294.5	0.000
10	11.11	32.97	5.99		10	11.11	32.97	5.99		25.20	277.4	0.029
25	10.62	33.06	5.89		20	10.77	33.04	5.94		25.31	267.4	0.056
49	10.07	33.15	5.58		30	10.50	33.08	5.83		25.39	260.2	0.082
73	9.10	33.33	4.97		50	9.99	33.16	5.55		25.54	246.4	0.133
96	8.65	33.51	4.57		75	9.05	33.36	4.90		25.85	217.4	0.191
111p	8.00	33.59	4.04		100	8.59	33.53	4.34		26.05	198.3	0.243
192p	-	34.04	2.28		150	(7.55)	33.83	3.20		(26.44)	(162.0)	(0.333)
279p	6.63	34.14	1.35		200	(7.15)	34.07	2.10		(26.69)	(139.5)	(0.409)
364p	6.09	34.09	1.28		250	(6.83)	34.14	1.49		(26.79)	(130.7)	(0.476)
443p	5.80	34.20	0.92		300	6.50	34.13	1.33		26.82	127.8	(0.541)
645p	4.92	34.29	0.67		400	5.94	34.13	1.15		26.89	121.9	(0.666)
838p	4.39	34.40	0.40		500	5.58	34.22	0.89		27.01	111.9	(0.782)
1040p	3.74	34.43	0.55		600	5.08	34.26	0.75		27.10	103.8	(0.890)
					700	4.77	34.33	0.55		27.19	95.9	(0.990)
					800	4.52	34.39	0.41		27.27	89.4	(1.083)
					1000	3.85	34.42	0.52		27.36	81.0	(1.253)
43.60	BLACK DOUGLAS; August 7, 1950; 1253 GCT; 40°28'N, 125°43'W; sounding, 1,580 fm; wind, 350°, force 3; weather, haze; sea, moderate; wire angle, 0°.											
0	15.52	32.68	4.15r		0	15.52	32.68	(5.35)		24.09	383.3	0.000
10	15.53	32.70	5.38		10	15.53	32.70	5.38		24.11	382.1	0.038
25	-	32.68	5.00		20	15.52	32.69	5.10		24.10	382.9	0.076
50	10.23	32.74	3.99r		30	15.51	32.68	4.93		24.10	383.7	0.115
75	9.62	33.00	4.57		50	10.23	32.74	4.80		25.17	281.1	0.181
100	8.48	33.30	3.97		75	9.62	33.01	4.57		25.48	252.1	0.248
154	7.44	33.84	2.87u		100	8.48	33.30	3.97		25.89	214.1	0.306
203	6.84	33.96	3.25		150	7.50	33.82	3.60		26.44	162.0	0.400
299	6.34	34.00	2.40		200	6.87	33.96	3.28		26.64	143.9	0.476
401	5.56	34.14	0.92		250	6.59	33.98	2.90		26.69	139.4	0.548
498	5.25	34.17	0.69		300	6.33	34.00	2.38		26.74	135.2	0.616
599	4.75	34.23	0.40		400	5.57	34.14	0.91		26.95	116.5	0.742
798	4.02	34.38	0.37		500	5.24	34.17	0.67		27.01	111.4	0.856
993	3.53	34.45	0.38		600	4.74	34.23	0.40		27.12	102.1	0.962
1195	3.09	34.51	0.67		700	4.34	34.31	0.40		27.22	92.2	1.059
					800	4.01	34.38	0.37		27.31	84.2	1.148
					1000	3.50	34.45	0.38		27.42	74.7	1.307

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	47.55
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

BLACK DOUGLAS; August 6, 1950; 2058 GCT; 40°04'N, 124°55'W; sounding, 680 fm; wind, 320°, force 4; weather, partly cloudy; sea, very rough; wire angle, 31°.

0	9.92	33.40	4.34r	0	9.92	33.40	(5.34)	25.74	226.5	0.000	
9	9.83	33.40	5.34	10	9.82	33.40	5.34	25.75	225.1	0.023	
22	9.67	33.62	4.53	20	9.69	33.60	4.59	25.93	208.4	0.044	
43	9.70	33.67	4.23	30	9.69	33.65	4.43	25.97	204.9	0.065	
65	9.58	33.71	3.68	50	9.70	33.68	3.96	25.99	203.3	0.106	
86	9.20	33.77	3.68	75	9.42	33.74	3.70	26.09	194.9	0.156	
130	8.68	33.87	2.60	100	9.02	33.80	3.47	26.20	184.8	0.203	
166	8.38	34.00	2.03	150	8.53	33.95	2.20	26.39	167.2	0.281	
237	-	34.09	1.94	200	(8.05)	34.04	2.00	(26.53)	154.3)	(0.372)	
313	6.62	34.14	1.07	250	(7.39)	34.11	1.82	(26.68)	(140.6)	(0.445)	
386	6.21	34.13	0.80	300	(6.76)	34.15	1.19	(26.80)	(129.7)	(0.513)	
545	4.84	34.14	0.58	400	6.06	34.13	0.77	26.88	123.4	(0.640)	
630	4.58	34.25	0.38	500	5.05	34.13	0.67	27.00	112.0	(0.757)	
812	4.08	34.25	0.43	600	4.67	34.23	0.45	27.12	101.1	(0.864)	
				700	4.38	34.26	0.39	27.18	96.4	(0.962)	
				800	4.10	34.25	0.41	27.20	94.8	(1.058)	
				1000	(3.60)	(34.35)		(27.33)	(83.2)	(1.236)	

BLACK DOUGLAS; August 7, 1950; 1932 GCT; 39°54'N, 125°18'W; sounding, 1,415 fm; wind, 320°, force 3; weather, partly cloudy; sea, slight; wire angle, 36°. 47.60

0	13.91	32.59	5.49	0	13.91	32.59	5.49	24.36	357.2	0.000	
8	13.28	32.68	5.32	10	12.95	32.72	5.32	24.66	329.3	0.034	
20	11.86	32.88	5.79	20	11.86	32.88	5.79	24.96	300.8	0.066	
45	10.62	32.92	5.95	30	11.44	32.92	5.90	25.10	287.9	0.095	
65	8.74	32.81	5.79	50	9.07	32.91	5.92	25.49	250.6	0.149	
88	9.15	33.10	5.43	75	8.88	32.83	5.65	25.46	254.1	0.212	
129	8.39	33.37	4.59	100	9.70	33.17	5.23	25.60	242.0	0.274	
166	7.63	33.68	3.17	150	7.83	33.56	3.80	26.19	186.0	0.381	
242	7.07	34.00	1.61	200	7.41	33.88	2.16	26.50	157.1	0.467	
323	6.28	34.00	1.48	250	7.01	34.01	1.60	26.66	142.8	0.542	
399	5.86	34.09	1.13	300	6.49	34.00	1.52	26.72	137.3	0.612	
477	5.24	34.14	0.79	400	5.85	34.09	1.11	26.87	123.7	0.742	
634	4.58	34.23	0.41	500	5.14	34.15	0.72	27.01	111.6	0.860	
803	4.11	34.29	0.34	600	4.72	34.21	0.47	27.10	103.2	0.967	
985	3.62	34.36	1.25r	700	4.38	34.25	0.34	27.17	97.2	1.067	
				800	4.10	34.29	0.34	27.23	91.9	1.162	
				1000	(3.59)	(34.36)		(27.34)	(82.4)	(1.336)	

BLACK DOUGLAS; August 6, 1950; 1128 GCT; 39°30'N, 124°30'W; sounding, 1,120 fm; wind, 320°, force 7; weather, haze; sea, very rough; wire angle, 8°. 50.55

0	10.20	32.86	4.49r	0	10.20	32.86	(6.30)	25.27	271.1	0.000	
10	10.21	33.01	6.21	10	10.21	33.01	6.21	25.39	260.2	0.027	
25	10.18	32.94	5.97	20	10.20	32.97	6.06	25.36	263.2	0.053	
55	10.13	33.09	5.65	30	10.18	32.94	5.92	25.33	265.5	0.079	
79	8.49	33.13	4.70	50	10.15	33.08	5.70	25.45	255.0	0.131	
108	9.19	33.73	3.50	75	8.54	33.12	5.05	25.74	227.6	0.192	
162	8.37	33.98	1.25r	100	9.15	33.44	3.77	25.89	213.4	0.247	
214	7.52	33.98	2.30	150	8.62	33.96	2.74	26.38	167.8	0.342	
318	6.85	34.12	2.10	200	7.75	33.98	2.35	26.53	154.5	0.423	
427	6.13	34.18	0.66	250	7.28	34.02	2.22	26.63	145.7	0.498	
531	5.49	34.23	0.46	300	6.98	34.10	2.13	26.73	136.4	0.568	
635	4.84	34.27	0.39	400	6.30	34.17	0.90	26.88	123.6	0.698	
840	4.01	34.38	0.68u	500	5.72	34.22	0.50	26.99	113.6	0.816	
1046	3.52	34.42	0.43	600	5.05	34.26	0.41	27.10	103.5	0.925	
1246	3.13	34.47	0.80	700	4.53	34.31	0.39	27.20	94.5	1.024	
				800	4.14	34.36	0.39	27.28	87.1	1.116	
				1000	3.61	34.42	0.40	27.39	78.1	1.281	

SIO

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OBSERVED					INTERPOLATED					COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m
50.60	BLACK DOUGLAS; August 8, 1950; 0212 GCT; 39°20'N, 124°52'W; sounding, 1,620 fm; wind, 350°, force 3; weather, partly cloudy; sea, moderate; wire angle, 5°.											
0	12.84	32.83	5.64		0	12.84	32.83	5.64		24.76	319.1	0.000
10	12.05	32.81	5.20		10	12.05	32.80	5.20		24.89	307.0	0.031
25	10.94	32.74	5.36		20	11.90	32.76	5.31		24.89	307.5	0.062
50	10.35	32.81	5.33		30	10.71	32.76	5.36		25.11	287.3	0.092
74	8.48	32.81	5.23		50	10.35	32.81	5.33		25.21	278.1	0.148
97	8.56	33.11	4.62		75	8.48	32.81	5.20		25.51	249.7	0.214
149a)	8.02	33.55	3.51		100	8.53	33.14	4.60		25.76	226.4	0.274
196a)	7.56	33.87	2.59		150	8.01	33.57	3.50		26.17	187.9	0.377
289	6.44	33.95	2.16		200	7.51	33.87	2.55		26.48	159.3	0.464
388	5.56	34.06	1.39		250	6.94	33.92	2.35		26.60	148.5	0.541
482	5.06	34.11	0.81		300	6.29	33.96	2.07		26.72	137.7	0.612
582	4.52	34.22	0.53		400	5.50	34.06	1.29		26.89	121.6	0.742
780	4.10	34.35	0.25		500	4.95	34.13	0.76		27.01	110.8	0.858
976	3.63	34.38	0.38		600	4.47	34.24	0.47		27.15	98.0	0.963
1177	3.14	34.52	0.60		700	4.22	34.31	0.28		27.24	90.8	1.057
					800	4.05	34.36	0.25		27.29	86.0	1.145
					1000	3.56	34.39	0.40		27.37	79.8	1.312
50.70	BLACK DOUGLAS; August 8, 1950; 0914 GCT; 39°00'N, 125°36.5'W; sounding, 2,100 fm; wind, 350°, force 3; weather, cloudy; sea, moderate; wire angle, 24°.											
0	15.27	32.70	5.23		0	15.27	32.70	5.23		24.16	376.4	0.000
9	15.25	32.68	4.52		10	15.25	32.68	4.53		24.15	377.9	0.038
23	15.08	32.72	4.95		20	15.18	32.71	4.82		24.19	374.5	0.075
46	14.18	32.77	4.74		30	14.83	32.74	4.93		24.29	365.2	0.112
69	12.04	32.77	4.82		50	13.95	32.77	4.75		24.50	345.8	0.183
91	10.67	32.77	4.73		75	11.56	32.77	4.80		24.96	302.0	0.264
140	9.21	32.92	4.67		100	10.19	32.78	4.71		25.21	278.7	0.337
182	8.80	33.46	3.67		150	9.11	33.02	4.43		25.57	244.8	0.467
267	7.97	33.95	2.07		200	8.60	33.64	3.25		26.14	192.1	0.577
356	6.66	33.96	1.55		250	8.13	33.91	2.29		26.42	166.0	0.667
440	6.24	34.09	1.05		300	7.56	33.96	1.82		26.54	154.9	0.746
530	5.58	34.15	0.88		400	6.47	34.01	1.29		26.73	137.7	0.893
708	4.52	34.16	0.40		500	5.80	34.15	0.91		26.93	119.9	1.022
889	4.00	34.32	0.30		600	5.09	34.15	0.64		27.01	112.1	1.138
1087	3.44	34.49	0.47		700	4.55	34.16	0.40		27.08	105.9	1.247
					800	4.26	34.24	0.30		27.18	97.4	1.348
					1000	3.68	34.42	0.36		27.38	79.0	1.525
50.80	BLACK DOUGLAS; August 8, 1950; 1543 GCT; 38°40'N, 126°21'W; sounding, 2,360 fm; wind, 350°, force 3; weather, overcast; sea, moderate; wire angle, 0°.											
0	15.65	32.68	4.89		0	15.65	32.68	4.89		24.06	385.8	0.000
10	15.61	32.59	5.26		10	15.61	32.59	5.26		24.01	391.6	0.039
25	15.40	32.60	5.40		20	15.47	32.59	5.35		24.04	389.1	0.078
50	14.33	32.68	5.88		30	15.25	32.61	5.52		24.10	383.3	0.117
74	11.40	32.70	5.23		50	14.33	32.68	5.88		24.35	360.0	0.191
98	9.78	32.79	5.41		75	11.18	32.70	5.21		24.98	300.6	0.273
152	8.59	33.37	4.50		100	9.75	32.80	5.41		25.30	270.1	0.345
200	8.17	33.69	3.01		150	8.62	33.32	4.55		25.88	215.2	0.466
296	7.62	34.07	1.64		200	8.17	33.70	3.01		26.25	181.3	0.566
397	6.36	34.00	1.44		250	7.99	33.95	1.89		26.47	161.0	0.651
494	5.93	34.14	0.76		300	7.55	34.06	1.62		26.62	147.3	0.727
595	-	34.23	0.49		400	6.35	34.00	1.42		26.74	137.0	0.870
794	4.62	34.31	0.26		500	(5.89)	34.15	0.73		(26.92)	(121.0)	(0.999)
990	3.98	34.42	0.47		600	(5.36)	34.23	0.45		(27.04)	(109.5)	(1.114)
1193	3.44	34.47	0.60		700	(4.94)	34.27	0.28		(27.13)	(102.4)	(1.220)
					800	4.59	34.32	0.26		27.20	95.5	(1.319)
					1000	3.94	34.42	0.48		27.35	82.0	(1.496)

a) Values at 149 and 196 meters appear to have been reversed; it is assumed they are in the order listed.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

BLACK DOUGLAS; August 8, 1950; 2129 GCT; 38°20'N, 127°05'W; sounding, 2,460 fm; wind, 340°, force 1; weather, overcast; sea, moderate; wire angle, 8°. 50.90

0	14.94	32.88	5.34	0	14.94	32.88	5.34	24.37	356.4	0.000	
10	12.95	32.92	5.28	10	12.95	32.92	5.28	24.81	314.6	0.034	
25	11.35	32.95	5.64	20	11.39	32.94	5.52	25.12	285.3	0.064	
50	11.01	33.19	5.50	30	11.35	32.97	5.62	25.15	282.6	0.092	
74	10.78	33.50	4.90	50	11.01	33.19	5.50	25.39	261.0	0.146	
98	9.00	33.58	3.82	75	10.63	33.50	4.88	25.69	232.2	0.208	
150	8.36	33.93	2.36	100	8.98	33.60	3.71	26.05	199.0	0.262	
197	7.73	33.99	2.13	150	8.36	33.93	2.36	26.40	166.2	0.353	
291	7.01	34.14	1.10	200	7.71	33.99	2.11	26.54	153.2	0.432	
390	6.05	34.08	0.88	250	7.35	34.07	1.43	26.66	143.0	0.507	
484	5.37	34.22	0.54	300	6.92	34.14	1.06	26.77	132.6	0.576	
585	-	34.25	0.46	400	5.96	34.09	0.84	26.86	125.1	0.704	
781	4.42	34.38	0.28	500	(5.30)	34.23	0.53	(27.05)	(107.6)	(0.821)	
976	3.77	34.42	0.44	600	(4.94)	34.26	0.44	(27.12)	(102.1)	(0.926)	
1179	3.25	34.49	0.61	700	(4.64)	34.33	0.31	(27.21)	(94.3)	(1.024)	
				800	4.35	34.38	0.28	27.28	88.1	(1.116)	
				1000	3.71	34.43	0.45	27.38	78.6	(1.282)	

BLACK DOUGLAS; August 9, 1950; 0346 GCT; 38°00'N, 127°49'W; sounding, 2,500 fm; wind, 340°, force 1; weather, overcast; sea, moderate; wire angle, 15°. 50.100

0	17.69	32.83	4.18	0	17.69	32.83	4.18	23.71	419.5	0.000	
9	17.25	32.79	4.81	10	17.21	32.79	4.88	23.79	412.1	0.042	
24	17.03	32.79	5.42	20	17.06	32.79	5.38	23.83	409.0	0.083	
48	14.77	32.83	4.72u	30	16.94	32.80	5.42	23.86	405.9	0.123	
72	10.92	32.76	5.18	50	14.38	32.83	5.34	24.45	350.0	0.199	
95	9.74	32.86	4.56	75	10.88	32.76	5.15	25.07	291.9	0.279	
146	8.37	33.28	4.39	100	9.63	32.88	4.47	25.38	262.3	0.348	
191	7.68	33.64	4.36	150	8.30	33.32	4.38	25.93	210.5	0.466	
281	6.99	33.89	2.35	200	7.64	33.68	4.27	26.31	175.2	0.563	
376	6.02	34.00	1.64	250	7.32	33.82	2.97	26.47	161.1	0.647	
467	5.62	34.09	0.83	300	6.71	33.92	2.22	26.63	146.1	0.723	
563	5.19	34.20	0.62	400	5.91	34.02	1.31	26.81	129.7	0.861	
752	4.50	34.33	0.35	500	5.48	34.13	0.74	26.95	117.3	0.985	
941	3.92	34.40	0.44	600	5.05	34.23	0.53	27.08	105.7	1.096	
1141	3.43	34.44	0.63	700	4.67	34.30	0.38	27.18	96.9	1.198	
				800	4.34	34.35	0.36	27.26	90.2	1.291	
				1000	3.76	34.41	0.49	27.36	80.6	1.462	

BLACK DOUGLAS; August 9, 1950; 1010 GCT; 37°40'N, 128°33'W; sounding, 2,600 fm; wind, 350°, force 2; weather, overcast; sea, moderate; wire angle, 2°. 50.110

0	17.41	32.92	4.30	0	17.41	32.92	4.30	23.84	407.0	0.000	
10	17.42	32.92	4.15	10	17.42	32.92	4.15	23.84	407.3	0.041	
25	17.27	32.92	4.74	20	17.34	32.92	4.50	23.86	405.8	0.081	
50	13.43	32.76	5.12	30	17.18	32.91	4.85	23.89	403.2	0.122	
75	11.98	32.80	4.71	50	13.43	32.76	5.12	24.60	336.5	0.196	
99	10.12	32.75	4.41	75	11.98	32.80	4.71	24.91	306.7	0.276	
152	9.26	33.40	3.97	100	10.07	32.75	4.39	25.21	278.9	0.349	
201	8.47	33.69	2.90	150	9.29	33.39	4.00	25.83	220.2	0.474	
297	7.35	34.05	1.70	200	8.49	33.69	2.94	26.19	186.7	0.576	
398	6.45	34.04	1.12	250	7.83	33.90	2.14	26.46	162.4	0.663	
494	5.64	34.13	0.76	300	7.34	34.05	1.66	26.64	145.1	0.740	
595	5.24	34.18	0.55	400	6.43	34.04	1.10	26.76	134.9	0.880	
794	4.41	34.30	0.36	500	5.61	34.13	0.75	26.94	118.9	1.007	
992	3.80	34.40	0.54	600	5.23	34.18	0.53	27.02	111.6	1.122	
1195	3.35	34.46	0.68	700	4.77	34.24	0.36	27.12	102.6	1.229	
				800	4.39	34.30	0.36	27.21	94.5	1.328	
				1000	3.79	34.40	0.55	27.35	81.7	1.504	

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

50.120 BLACK DOUGLAS; August 9, 1950; 1615 GCT; 37°20'N, 129°16.5'W; sounding, 2,600 fm; wind, 300°, force 3; weather, cloudy; sea, moderate; wire angle, 15°.

0	18.07	32.94	4.88	0	18.07	32.94	4.88	23.70	420.5	0.000
9	18.04	32.94	4.51	10	18.03	32.94	4.51	23.71	420.1	0.042
23	17.90	32.92	5.29	20	17.94	32.93	5.26	23.72	418.8	0.084
48	15.47	32.89	4.36r	30	17.71	32.91	5.34	23.76	415.3	0.126
71	12.68	32.83	5.43	50	14.95	32.88	5.40	24.37	357.9	0.203
95	10.84	32.81	5.20	75	12.20	32.83	5.42	24.89	309.0	0.286
145	9.07	33.22	4.08	100	10.60	32.82	5.10	25.17	282.4	0.360
190	8.14	33.66	2.90	150	8.92	33.28	3.96	25.81	222.7	0.486
278	6.95	33.94	2.36	200	7.95	33.72	2.84	26.30	176.6	0.587
371	5.99	34.00	1.68	250	7.27	33.90	2.54	26.54	154.5	0.669
460	5.28	34.05	1.08	300	6.71	33.96	2.22	26.66	143.2	0.743
555	4.78	34.11	0.73	400	5.74	34.02	1.45	26.83	127.5	0.879
743	4.27	34.31	0.31	500	5.01	34.07	0.92	26.96	116.0	1.000
932	3.70	34.38	0.37	600	4.67	34.17	0.56	27.08	105.6	1.111
1132	3.34	34.45	0.58	700	4.41	34.28	0.35	27.19	95.5	1.212
				800	4.09	34.34	0.31	27.27	88.0	1.303
				1000	3.57	34.40	0.41	27.37	79.2	1.470

50.130 BLACK DOUGLAS; August 9, 1950; 2304 GCT; 37°00'N, 130°00'W; sounding, 2,700 fm; wind, 300°, force 3; weather, partly cloudy; sea, moderate; wire angle, 20°.

0	18.97	32.98	3.76	0	18.97	32.98	3.76	23.51	438.9	0.000
9	18.69	32.96	4.39	10	18.66	32.96	4.38	23.57	433.2	0.044
23	18.41	32.95	4.03	20	18.38	32.95	4.02	23.63	427.7	0.087
46	14.17	32.86	4.87	30	18.10	32.93	4.12	23.69	422.9	0.129
70	11.48	32.84	4.83	50	13.15	32.85	4.86	24.72	324.5	0.204
92	10.53	32.83	3.82r	75	11.28	32.84	4.79	25.07	292.0	0.281
142	8.57	33.01	4.06	100	10.10	32.84	4.59	25.27	272.8	0.351
186	8.27	33.73	2.44	150	8.54	33.06	3.91	25.69	233.3	0.478
275	7.14	34.00	1.94	200	8.12	33.83	2.37	26.36	170.9	0.579
368	6.00	34.02	1.38	250	7.47	33.98	2.09	26.57	151.3	0.660
456	5.25	34.05	1.18	300	6.81	34.01	1.78	26.69	140.8	0.732
550	4.71	34.12	0.74	400	5.71	34.02	1.34	26.84	127.1	0.866
736	4.16	34.29	0.41	500	4.97	34.08	0.98	26.97	114.8	0.987
923	3.66	34.37	0.30	600	4.55	34.17	0.62	27.09	104.1	1.097
1120	3.36	34.51	0.60	700	4.27	34.26	0.45	27.19	95.1	1.196
				800	3.97	34.31	0.37	27.26	88.8	1.288
				1000	3.54	34.42	0.38	27.39	77.3	1.454

53.54 BLACK DOUGLAS; August 6, 1950; 0056 GCT; 38°58'N, 124°06'W; sounding, 210 fm; wind, 320°, force 4; weather, clear; sea, very rough; wire angle, 25°.

0	11.61	33.78r	5.35	0	11.61	(33.47)	5.35	(25.50)	(249.4)	(0.000)
9	11.56	33.45	5.40	10	11.56	33.45	5.39	25.49	250.4	0.025
22	10.77	33.42	5.25	20	11.06	33.43	5.30	25.56	243.5	0.050
45	9.25	33.54	3.90	30	10.22	33.43	4.87	25.71	229.7	0.073
68	8.80	33.66	3.54	50	9.17	33.56	3.76	25.99	203.9	0.117
90	8.61	33.82	1.67r	75	8.73	33.72	3.44	26.18	185.9	0.165
139	8.13	33.96	2.26	100	8.50	33.87	3.05	26.33	171.8	0.210
181	7.80	34.01	2.09	150	8.03	33.97	2.20	26.48	158.4	0.292
224	7.48	-	1.45	200	7.69	34.04	1.88	26.59	149.2	0.370
267	7.14	34.13	1.29	250	7.26	34.11	1.35	26.70	138.8	0.441
318	6.97	34.14	1.12	300	7.01	34.14	1.18	26.76	133.9	0.510

57.54 BLACK DOUGLAS; August 5, 1950; 1800 GCT; 38°24'N, 123°35'W; sounding, 135 fm; wind, 320°, force 5; weather, overcast; sea, very rough; wire angle, 20°.

0	11.01	33.44	5.22	0	11.01	33.44	5.22	25.58	241.5	0.000
10	10.98	33.44	5.20	10	10.98	33.44	5.20	25.58	241.3	0.024
24	11.09	33.52	4.91	20	11.09	33.47	5.00	25.59	241.0	0.048
47	10.37	33.49	4.84	30	11.09	33.53	4.88	25.64	236.8	0.072
70	9.48	33.68	3.29	50	10.23	33.49	4.81	25.76	225.8	0.118
92	9.11	33.78	2.90	75	9.36	33.71	3.16	26.07	196.2	0.171
141	8.63	33.95	2.91	100	9.02	33.81	2.89	26.20	184.0	0.219
187	8.14	34.00	1.70	150	8.55	33.96	2.82	26.40	166.8	0.306

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

CREST; August 10, 1950; 0244 GCT; 37°37'N, 123°37'W; sounding, 1,380 fm; wind, 320°, force 5; weather, partly cloudy; sea, very rough; wire angle, 28°. 60.60

0	13.67	33.40	6.24	0.72	0	13.67	33.40	6.24	0.72	25.04	292.9	0.000
9	13.64	33.46	6.29	0.72	10	13.63	33.50	6.26	0.72	25.12	285.2	0.029
22	11.88	33.57	5.74	1.20	20	12.15	33.57	5.84	1.05	25.47	252.3	0.056
48	10.24	33.49	4.39	1.82	30	11.20	33.56	5.25	1.57	25.64	236.5	0.080
70	9.12	33.57	3.78	1.97	50	10.08	33.49	4.29	1.84	25.78	223.4	0.126
97	8.41	33.68	3.67	2.17	75	8.95	33.59	3.76	2.01	26.04	198.8	0.179
145	8.10	34.20r	2.22	2.75	100	8.36	33.69	3.59	2.19	26.21	183.1	0.227
192	7.84	34.05	1.58	2.94	150	8.08	33.98	2.10	2.79	26.48	158.4	0.312
285	7.08	34.13	1.21	3.09	200	7.76	34.06	1.54	2.96	26.59	148.7	0.389
383	6.48	34.14	0.79	3.26	250	7.34	34.10	1.34	3.05	26.68	140.6	0.461
480	6.01	34.22	0.52	3.46	300	6.96	34.13	1.14	3.11	26.76	133.9	0.530
578	5.62	34.22	0.38	3.54	400	6.38	34.15	0.74	3.30	26.85	126.1	0.660
778	4.93	34.33	0.29	3.68	500	5.94	34.22	0.49	3.47	26.97	116.5	0.782
988	4.28	34.36	0.38	3.60	600	5.53	34.22	0.37	3.56	27.02	112.4	0.896
1191	3.50	34.47	0.56	3.63	700	5.18	34.28	0.31	3.64	27.11	104.7	1.005
					800	4.86	34.34	0.30	3.68	27.19	97.3	1.106
					1000	4.23	34.36	0.40	3.60	27.28	90.0	1.293

CREST; August 10, 1950; 0825 GCT; 37°17'N, 124°21'W; sounding, 2,150 fm; wind, 320°, force 4; weather, clear; sea, very rough; wire angle, 5°. 60.70

0	14.25	33.22	5.18	0.70	0	14.25	33.22	5.18	0.70	24.78	317.5	0.000
10	14.22	33.24	4.56	0.71	10	14.22	33.24	4.56	0.71	24.80	311.2	0.032
25	14.14	33.22	4.75	0.93	20	14.17	33.23	4.71	0.77	24.81	315.7	0.063
50	10.28	33.57	3.98	1.80	30	13.50	33.22	4.74	1.03	24.94	303.6	0.094
75	9.07	33.66	3.02	2.05	50	10.28	33.57	3.98	1.80	25.81	220.7	0.147
100	8.41	33.82	2.53	2.17	75	9.07	33.66	3.02	2.05	26.08	195.4	0.199
154	7.96	33.96	1.93	2.44	100	8.41	33.82	2.53	2.17	26.31	174.3	0.245
203	7.70	34.04	1.38	2.70	150	7.98	33.95	1.97	2.42	26.47	159.2	0.328
300	6.48	34.09	1.05	3.03	200	7.71	34.04	1.41	2.68	26.59	149.3	0.406
400	5.90	34.13	0.57	3.27	250	7.28	34.07	1.17	2.88	26.67	142.0	0.478
497	5.37	34.20	0.44	3.34	300	6.48	34.09	1.05	3.03	26.79	130.5	0.547
599	5.12	34.29	0.40	3.42	400	5.90	34.13	0.57	3.27	26.90	121.3	0.672
800	4.32	34.40	0.32	3.53	500	5.36	34.20	0.45	3.35	27.02	110.6	0.789
998	3.80	34.42	0.63	3.46	600	5.11	34.29	0.40	3.42	27.12	102.0	0.895
1201	3.30	34.49	0.84	3.41	700	4.72	34.36	0.34	3.47	27.22	93.1	0.992
					800	4.32	34.40	0.32	3.53	27.30	86.4	1.082
					1000	3.80	34.42	0.63	3.46	27.37	80.4	1.248

CREST; August 10, 1950; 1405 GCT; 36°57.5'N, 125°04.5'W; sounding, 2,350 fm; wind, 330°, force 5; weather, overcast; sea, very rough; wire angle, 39°. 60.80

0	15.08	33.39	5.64	0.73	0	15.08	33.39	5.64	0.73	24.73	321.9	0.000
8	15.08	33.39	5.61	0.78	10	15.08	33.39	5.61	0.80	24.73	322.2	0.063
20	14.46	33.42	5.68	0.87	20	14.46	33.42	5.68	0.87	24.89	307.8	0.095
43	12.03	33.46	5.40	1.65	30	13.20	33.44	5.66	1.10	25.17	281.7	0.124
61	9.23	33.39	4.73	1.92	50	10.35	33.40	5.13	1.80	25.66	234.5	0.176
83	8.68	33.62	3.92	2.19	75	8.83	33.47	4.21	2.11	25.97	205.9	0.231
123	8.11	33.89	2.78	2.39	100	8.40	33.82	3.35	2.30	26.31	174.0	0.278
161	7.85	33.96	2.36	2.42	150	7.91	33.94	2.46	2.42	26.48	158.9	0.362
234	6.89	34.02	2.14	2.66	200	7.45	34.00	2.22	2.53	26.59	148.8	0.438
312	6.12	34.04	1.68	2.94a)	250	6.65	34.02	2.08	2.72	26.72	137.2	0.510
386	5.76	34.13	0.91	3.18	300	6.20	34.04	1.77	2.89	26.79	130.6	0.577
464	5.36	34.18	0.69	3.24	400	5.67	34.14	0.84	3.19	26.94	117.7	0.701
623	4.86	34.33	0.28	-	500	5.23	34.20	0.57	(3.27)	26.04	109.0	0.814
799	4.28	34.42	0.34	3.40	600	4.92	34.30	0.32	(3.32)	27.15	98.9	0.919
980	3.65	34.42	0.52	3.48	700	4.60	34.38	0.29	(3.36)	27.25	90.1	1.013
					800	4.26	34.42	0.34	3.40	27.32	84.0	1.100
					1000	(3.56)	(34.42)	(0.56)	(3.48)	(27.39)	(77.6)	(1.262)

a) Alternate value, 3.16 μg at/L, not used in interpolation.

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OBSERVED					INTERPOLATED					COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg at/L	Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg at/L	σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m

60.90 CREST; August 10, 1950; 1924 GCT; 36°39'N, 125°47'W; sounding, 2,400 fm; wind, 340°, force 4; weather, overcast; sea, very rough; wire angle, 16°.

0	15.14	32.79	4.57	0.50	0	15.14	32.79	4.57	0.50	24.26	367.3	0.000
9	15.10	32.81	5.30	0.44	10	15.10	32.81	5.29	0.44	24.28	365.1	0.037
23	13.75	32.83	5.21	0.64	20	13.95	32.83	5.22	0.55	24.54	340.7	0.072
52	10.22	32.88	5.33	1.26	30	12.80	32.84	5.22	0.80	24.78	318.2	0.105
76	9.30	33.08	4.64	1.72	50	10.45	32.87	5.33	1.22	25.24	275.3	0.164
105	8.74	33.40	3.82	1.78	75	9.32	33.08	4.68	1.72	25.59	242.2	0.229
158	8.22	33.82	2.62	2.29	100	8.80	33.32	3.94	1.77	25.86	217.0	0.286
210	7.62	33.98	2.02	2.55	150	8.28	33.79	2.76	2.18	26.30	175.4	0.384
312	6.12	33.95	2.18	2.50	200	7.74	33.97	2.06	2.53	26.52	155.1	0.467
416	5.09	34.02	1.37	2.64a)	250	7.06	33.98	2.04	2.53	26.63	145.7	0.542
516	4.64	34.13	0.60	2.99	300	6.30	33.95	2.16	2.50	26.71	138.5	0.613
617	4.33	34.20	0.51	3.09	400	5.17	34.00	1.55	2.61	26.89	122.0	0.743
818	3.97	34.38	0.35	3.11	500	4.70	34.11	0.64	2.93	27.03	109.4	0.859
1027	3.47	34.45	0.53	3.18	600	4.36	34.19	0.51	3.08	27.13	100.4	0.964
1231	3.10	34.49	0.72	3.16	700	4.17	34.25	0.42	3.10	27.19	94.7	1.061
					800	4.00	34.36	0.36	3.11	27.30	85.5	1.150
					1000	3.55	34.45	0.51	3.17	27.42	75.2	1.313

60.100 CREST; August 11, 1950; 0056 GCT; 36°19'N, 126°31'W; sounding, 2,450 fm; wind 340°, force 3; weather, cloudy; sea, rough; wire angle, 40°.

0	15.68	32.83	5.81	0.79	0	15.68	32.83	5.81	0.79	24.18	375.2	0.000
8	15.17	32.81	5.81	0.80	10	14.90	32.80	5.82	0.80	24.32	361.7	0.037
20	13.36	32.79	6.14	0.83	20	13.36	32.79	6.14	0.83	24.63	332.0	0.072
39	11.63	32.86	6.14	0.94	30	12.40	32.84	6.14	0.89	24.86	310.8	0.104
58	10.22	32.72	6.09	1.08	50	10.60	32.72	6.11	1.02	25.09	288.8	0.164
75	10.01	32.86	5.99	1.28	75	10.01	32.86	5.99	1.28	25.30	269.2	0.233
112	8.70	33.04	5.14	1.75	100	9.35	32.99	5.42	1.59	25.51	249.8	0.298
143	8.01	33.37	4.56	2.04	150	7.99	33.49	4.40	2.10	26.11	193.3	0.409
203	7.90	33.84	2.94	2.46	200	7.91	33.83	3.05	2.44	26.39	167.7	0.499
267	7.18	33.98	1.91	2.72	250	7.48	33.96	2.07	2.66	26.55	153.0	0.579
330	6.56	34.02	1.55	3.01	300	6.85	34.00	1.68	2.86	26.67	142.1	0.653
398	5.85	34.05	1.06	3.34	400	5.83	34.05	1.04	3.34	26.85	126.4	0.788
537	5.20	34.18	0.50	3.68	500	5.32	34.13	0.60	3.60	26.97	115.3	0.909
690	4.68	34.36	0.29	3.87	600	4.98	34.27	0.37	3.77	27.12	101.9	1.017
881	4.04	34.34	0.35	3.94	700	4.63	34.36	0.31	3.88	27.23	92.0	1.114
					800	4.32	34.35	0.34	3.92	27.26	90.0	1.205
					1000	(3.69)	(34.35)			(27.32)	(84.3)	(1.379)

60.110 CREST; August 11, 1950; 0646 GCT; 35°58'N, 127°12.5'W; sounding, 2,400 fm; wind, 340°, force 4; weather, overcast; sea, very rough; wire angle, 23°.

0	17.43	32.87	4.64	0.63	0	17.43	32.87	4.64	0.63	23.80	410.7	0.000
9	17.41	32.87	5.17	0.62	10	17.41	32.87	5.19	0.62	23.81	410.8	0.041
23	16.67	32.88	5.36	0.63	20	16.85	32.88	5.35	0.62	23.95	397.8	0.081
51	16.27	32.86	4.90	0.64	30	16.55	32.88	5.30	0.64	24.01	391.4	0.121
74	13.83	32.83	5.21	0.64	50	16.28	32.86	4.92	0.64	24.06	387.3	0.199
101	11.99	32.77	5.50	0.67	75	13.75	32.83	5.22	0.64	24.58	338.2	0.290
150	9.36	32.79	5.14	1.20	100	12.05	32.77	5.49	0.67	24.87	311.2	0.371
198	8.18	33.44	4.06	1.85	150	9.36	32.79	5.14	1.20	25.36	265.5	0.515
290	7.43	33.88	2.69	2.35	200	8.15	33.46	4.03	1.87	26.06	198.8	0.631
386	6.15	33.93	1.91	2.58	250	7.67	33.76	3.21	2.22	26.37	170.5	0.724
479	5.65	34.05	0.89	3.11	300	7.34	33.89	2.59	2.37	26.52	157.0	0.805
572	4.82	34.09	0.68	3.24	400	6.05	33.94	1.76	2.66	26.73	137.4	0.952
762	4.17	34.20	0.36	3.40	500	5.50	34.07	0.80	3.15	26.78	133.4	1.087
960	3.72	34.33	0.39	3.43	600	4.67	34.10	0.62	3.26	27.02	110.7	1.209
1156	3.32	34.38	0.66	3.38	700	4.34	34.15	0.44	3.36	27.10	104.1	1.317
					800	4.09	34.23	0.36	3.40	27.19	96.2	1.417
					1000	3.65	34.35	0.42	3.42	27.33	83.8	1.597

a) Alternate value, 2.84 µg at/L, not used in interpolation.

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

CREST; August 11, 1950; 1205, 1252 GCT; 35°39'N, 127°55'W; sounding, 2,600 fm; wind, 350°, force 3; weather, overcast; sea, very rough; wire angle, 3°, 3°. 60.120

0	17.71	33.03	5.37	0.59	0	17.71	33.03	5.37	0.59	23.86	405.6	0.000
10	17.72	33.03	5.41	0.63	10	17.72	33.03	5.41	0.63	23.85	406.2	0.041
25	17.11	33.04	5.47	0.62	20	17.50	33.04	5.44	0.62	23.91	400.7	0.081
55	13.53	32.84	6.29	0.71	30	17.03	33.04	5.58	0.63	24.03	390.4	0.121
79	12.04	32.84	5.89	0.75	50	14.50	32.85	6.29	0.70	24.44	350.9	0.195
109	10.48	32.94	5.61	1.12	75	12.30	32.84	5.98	0.74	24.88	310.0	0.277
164	9.46	33.51	3.83	1.99	100	10.95	32.89	5.74	0.95	25.16	283.2	0.351
219	8.44	33.87	3.86	2.04	150	9.65	33.41	3.90	1.94	25.79	224.4	0.478
					200	8.80	33.69	3.83	2.01	26.15	191.4	0.583
328	6.88	34.00	2.00	2.67	250	7.88	33.86	3.68	2.14	26.42	166.1	0.672
441	6.06	34.05	0.87	3.41	300	7.20	33.96	2.61	2.44	26.59	149.8	0.750
550	5.23	34.18	0.50	3.63a)	400	6.34	34.03	1.11	3.23	26.76	134.5	0.893
658	4.74	34.22	0.32	3.92	500	5.60	34.10	0.64	3.55	26.91	121.0	1.020
870	3.97	34.36	0.37	3.81	600	4.97	34.21	0.39	3.77	27.07	106.2	1.134
1083	3.52	34.43	0.61	3.84	700	4.55	34.24	0.32	3.90	27.15	99.9	1.237
1287	3.10	34.51	0.84	3.72	800	4.17	34.30	0.33	3.84	27.23	91.9	1.333
					1000	3.70	34.41	0.49	3.82	27.37	79.9	1.505

CREST; August 11, 1950; 1829, 1916 GCT; 35°15.5'N, 128°36.5'W; sounding, 2,600 fm; wind, 360°, force 3; weather, cloudy; sea, very rough; wire angle, 6°, 8°. 60.130

0	17.94	33.06	5.52	0.59	0	17.94	33.06	5.52	0.59	23.82	408.8	0.000
10	17.87	33.10	5.17	0.53	10	17.87	33.10	5.17	0.53	23.87	404.5	0.041
25	17.58	33.06	5.26	0.52	20	17.65	33.07	5.23	0.52	23.90	402.0	0.081
49	16.59	33.08	5.39	0.54	30	17.45	33.05	5.30	0.52	23.93	399.2	0.121
					50	16.57	33.08	5.39	0.54	24.16	377.9	0.199
74	12.52	33.03	5.42	0.68	75	12.30	33.03	5.43	0.68	25.02	296.1	0.283
98	10.99	33.13	5.10	1.03	100	10.87	33.14	5.08	1.06	25.37	263.4	0.353
152	8.88	33.42	4.12	1.83	150	8.90	33.41	4.15	1.82	25.91	212.7	0.472
201	8.02	33.80	4.25r	1.81r	200	8.05	33.79	3.42	2.01	26.34	172.9	0.569
297	7.29	33.98	1.98	2.42	250	7.57	33.91	2.64	2.22	26.50	157.9	0.651
398	6.10	34.04	1.13	2.80	300	7.25	33.98	1.96	2.43	26.60	149.0	0.727
493	5.38	34.07	0.77	3.17	400	6.05	34.04	1.11	2.80	26.81	130.0	0.867
595	4.99	34.20	0.53	3.27	500	5.34	34.07	0.75	3.19	26.92	120.0	0.992
794	4.32	34.33	0.34	3.36	600	4.96	34.20	0.52	3.26	27.07	106.8	1.105
989	3.69	34.36	0.37	3.40	700	4.60	34.30	0.41	3.31	27.19	96.1	1.207
1191	3.24	34.46	0.53	3.38	800	4.30	34.33	0.35	3.36	27.24	91.2	1.300
					1000	3.65	34.36	0.38	3.40	27.33	83.0	1.475

CREST; August 9, 1950; 2248 GCT; 37°35.5'N, 123°09'W; sounding, 690 fm; wind, 320°, force 5; weather, overcast; sea, rough; wire angle, 15°. 61.55

0	13.37	33.44	5.17	0.75	0	13.37	33.44	5.17	0.75	25.13	284.1	0.000
10	12.89	33.43	4.93	0.82	10	12.89	33.43	4.93	0.82	25.22	276.0	0.028
24	10.15	33.55	3.56	1.92	20	10.50	33.49	4.45	1.50	25.71	229.6	0.053
48	9.62	33.69	2.86	2.04	30	9.95	33.64	3.27	1.96	25.92	209.8	0.075
72	9.28	33.69	2.52	2.18	50	9.55	33.69	2.82	2.05	26.03	200.2	0.116
96	9.12	33.82	2.17	2.35	75	9.25	33.69	2.48	2.20	26.07	196.0	0.166
149	8.42	33.98	1.74	2.58	100	9.10	33.85	2.12	2.37	26.22	182.3	0.213
197	8.07	34.00	1.69	2.78b)	150	8.40	33.98	1.73	2.58	26.43	163.0	0.299
290	7.51	34.07	1.72	2.73	200	8.05	34.00	1.70	2.78	26.50	157.3	0.380
387	6.98	34.13	1.25	2.90	250	7.75	34.03	1.71	2.75	26.57	151.6	0.457
480	6.13	34.16	0.67	3.14c)	300	7.45	34.08	1.70	2.74	26.65	144.4	0.531
581	5.72	34.22	0.32	3.36	400	6.86	34.13	1.15	2.93	26.77	134.1	0.669
678	5.18	34.25	0.46	3.45	500	6.01	34.17	0.58	3.18	26.92	121.1	0.797
781	4.87	34.29	0.46	3.53	600	5.64	34.23	0.35	3.39	27.01	113.1	0.915
978	4.16	34.38	-	3.50	700	5.10	34.26	0.45	3.46	27.10	105.2	1.023
					800	4.31	34.30		3.53	27.16	99.7	1.126
					1000	(4.06)	(34.39)		(3.49)	(27.32)	(85.7)	(1.312)

a) Alternate value, 3.91 µg at/L, not used in interpolation.
b) Alternate value, 2.53 µg at/L, not used in interpolation.
c) Alternate value, 3.33 µg at/L, not used in interpolation.

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

63.57 CREST; August 9, 1950; 1814 GCT; 37°09'N, 122°58.5'W; sounding, 330 fm; wind, 320°, force 5; weather, overcast; sea, rough; wire angle, 17°.

0	15.08	33.22	5.75	0.69	0	15.08	33.22	5.75	0.69	24.61	334.2	0.000
10	15.07	33.17	5.78	0.75	10	15.07	33.17	5.78	0.75	24.57	338.1	0.034
24	13.68	33.12	5.84	0.99	20	14.95	33.13	5.82	0.91	24.56	338.8	0.067
48	9.49	33.04	5.39	1.54	30	11.25	33.09	5.83	1.10	25.27	272.0	0.098
72	10.42	33.55	5.03	1.94	50	9.50	33.04	5.35	1.58	25.53	247.5	0.150
96	9.85	33.69	3.11	2.05	75	10.41	33.57	4.95	1.88	25.79	223.4	0.209
147	9.08	33.91	2.37	2.30	100	9.79	33.71	2.98	2.07	26.00	203.5	0.262
192	8.08	33.91	3.11r	2.26r	150	9.04	33.91	2.32	2.32	26.28	177.9	0.357
237	7.68	34.02	1.83	2.79	200	7.97	33.91	1.95	2.58	26.44	162.8	0.442
282	6.99	34.04	1.77	2.95	250	7.50	34.03	1.81	2.83	26.61	148.0	0.521
335	6.70	34.05	1.39	3.11	300	6.86	34.04	1.68	3.01	26.70	139.3	0.592
383	6.36	34.14	0.88	3.20	400	6.20	34.15	0.78	3.22	26.88	123.7	0.723
432	6.00	34.16	0.76	3.30	500	(5.75)	(34.16)			(26.94)	(118.5)	(0.845)
481	5.83	34.16	0.68	3.39								

67.55 CREST; August 9, 1950; 1145 GCT; 36°38.5'N, 122°26'W; sounding, 1,230 fm; wind, 320°, force 5; weather, overcast; sea, rough; wire angle, 10°.

0	13.61	33.30	5.91	0.75	0	13.61	33.30	5.91	0.75	24.97	299.2	0.000
10	13.62	33.35	6.11	0.71	10	13.62	33.35	6.11	0.71	25.01	295.8	0.030
24	11.87	33.37	5.49	0.95	20	13.60	33.36	5.75	0.82	25.02	295.0	0.059
54	9.52	33.50	3.50	1.81	30	10.90	33.39	4.95	1.66	25.56	243.9	0.086
78	9.33	33.76	2.77	2.02	50	9.60	33.48	3.70	1.79	25.85	216.5	0.132
108	9.08	33.89	2.16	2.22	75	9.35	33.74	2.79	1.99	26.10	193.5	0.184
152	8.77	33.96	1.77	2.45	100	9.15	33.87	2.28	2.17	26.23	181.6	0.230
215	8.21	34.05	1.45	2.56	150	8.79	33.96	1.78	2.43	26.36	170.4	0.318
321	7.29	34.13	1.18	2.67	200	8.35	34.03	1.51	2.54	26.48	159.5	0.401
432	6.43	34.18	0.79	2.90	250	7.91	34.08	1.37	2.59	26.59	150.2	0.478
538	5.98	34.20	0.49	3.04	300	7.47	34.12	1.25	2.64	26.68	141.8	0.552
644	5.24	34.23	0.40	3.33	400	6.65	34.16	0.90	2.84	26.83	129.0	0.686
852	4.55	34.36	0.34	3.59	500	6.10	34.19	0.57	3.00	26.92	120.8	0.811
1063	3.80	34.42	0.60	3.58	600	5.52	34.21	0.41	3.17	27.01	113.0	0.928
1281	3.29	34.48	0.77	3.38	700	5.01	34.25	0.37	3.46	27.10	105.3	1.037
					800	4.73	34.32	0.35	3.57	27.19	97.4	1.139
					1000	4.02	34.41	0.50	3.58	27.34	84.1	1.321

70.55 CREST; August 14, 1950; 0434 GCT; 35°47.5'N, 122°10.5'W; sounding, 740 fm; wind, 320°, force 6; weather, fog; sea, high; wire angle, 37°.

0	13.89	33.35	5.75	0.69	0	13.89	33.35	5.75	0.69	24.95	301.0	0.000
8	13.87	33.33	5.81	0.70	10	13.86	33.33	5.83	0.70	24.94	302.4	0.030
20	13.71	33.37	5.82	0.75	20	13.71	33.37	5.82	0.75	25.01	296.6	0.060
40	11.04	33.42	4.89	1.39	30	11.90	33.40	5.50	1.10	25.39	260.6	0.088
60	9.14	33.33	4.57	1.78	50	9.95	33.46	4.73	1.61	25.78	223.5	0.136
78	9.43r	33.64	3.53	2.02	75	8.85	33.63	3.60	1.98	26.09	194.3	0.189
121	8.40	33.75	3.10	2.24	100	8.57	33.70	3.24	2.16	26.19	185.4	0.236
159	7.95	33.82	3.06	2.28	150	8.05	33.80	3.05	2.28	26.35	171.3	0.325
235	6.84	33.95	2.36	2.36	200	7.37	33.90	2.77	2.31	26.52	155.1	0.407
316	6.00	34.00	1.62	2.67	250	6.62	33.96	2.22	2.39	26.67	141.3	0.481
394	5.89	34.11	0.89	3.05a)	300	6.11	33.99	1.71	2.57	26.76	133.1	0.550
467	5.74	34.16	0.61	3.41	400	5.90	34.12	0.86	3.07	26.89	122.1	0.677
638	4.88	34.25	0.40	3.55	500	5.63	34.17	0.54	3.45	26.96	116.2	0.797
811	4.59	34.34	0.37	3.69	600	5.05	34.22	0.43	3.52	27.07	106.4	0.908
1002	4.12	34.38	0.49	3.83	700	4.73	34.29	0.38	3.61	27.17	98.4	1.010
					800	4.60	34.34	0.37	3.68	27.22	94.1	1.107
					1000	4.14	34.38	0.50	3.80	27.30	87.4	1.288

a) Alternate value, 3.32 μg at/L, not used in interpolation.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	µg at/L	m	°C	‰	ml/L	µg at/L	g/L	$10^5 cm^3/g$	dyn. m	
CREST; August 14, 1950; 0049 GCT; 35°40'N, 122°30'W; sounding, 1,900 fm; wind, 340°, force 5; weather, partly cloudy; sea, very rough; wire angle, 30°.													70.60
0	15.74	33.28	4.69	0.36	0	15.74	33.28	4.69	0.36	24.50	343.8	0.000	
8	15.62	33.30	4.56	0.25	10	15.62	33.30	4.58	0.25	24.55	340.1	0.034	
21	15.59	33.26	5.40	0.31	20	15.60	33.26	5.40	0.31	24.52	342.9	0.068	
47	10.52	33.24	3.87	1.33	30	15.43	33.24	4.80	0.88	24.54	341.1	0.103	
68	9.44	33.33	3.59	1.63	50	10.50	33.24	3.84	1.40	25.51	248.7	0.161	
93	9.37	33.66	2.58	1.96	75	9.40	33.45	3.40	1.71	25.86	216.1	0.220	
136	8.81	33.87	1.86	2.24	100	9.33	33.71	2.42	2.02	26.08	196.2	0.271	
176	8.28	33.96	1.43	2.33	150	8.60	33.91	1.68	2.28	26.35	171.2	0.363	
257	7.53	34.11	1.15	2.54	200	8.00	34.01	1.31	2.39	26.52	155.8	0.444	
342	6.84	34.14	0.67	2.66	250	7.58	34.10	1.16	2.53	26.65	144.0	0.520	
425	6.04	34.14	0.60	3.02	300	7.19	34.13	0.94	2.60	26.73	137.1	0.590	
510	5.58	34.22	0.41	3.18	400	6.29	34.14	0.60	2.90	26.86	125.7	0.721	
687	4.90	34.29	0.29	3.19	500	5.62	34.21	0.45	3.17	27.00	113.1	0.840	
876	4.31	34.40	0.42	3.20	600	5.20	34.27	0.35	3.20	27.10	104.6	0.949	
1068	3.69	34.40	0.47	3.25	700	4.87	34.30	0.29	3.19	27.16	99.4	1.051	
					800	4.56	34.35	0.33	3.20	27.23	92.9	1.147	
					1000	3.89	34.40	0.45	3.23	27.34	82.9	1.324	
CREST; August 13, 1950; 1921 GCT; 35°23'N, 123°11'W; sounding, 2,100 fm; wind, 340°, force 6; weather, cloudy; sea, high; wire angle, 30°.													70.70
0	16.28	33.17	5.50	0.39	0	16.28	33.17	5.50	0.39	24.30	363.5	0.000	
8	16.21	33.14	5.58	0.43	10	16.21	33.14	5.60	0.43	24.29	364.2	0.036	
21	16.21	33.13	5.71	0.45	20	16.21	33.13	5.69	0.45	24.29	365.2	0.073	
47	12.14	33.03	5.53	0.72	30	15.25	33.10	5.71	0.50	24.47	347.5	0.108	
68	10.77	33.15	5.18	0.99	50	11.87	33.03	5.49	0.76	25.11	287.8	0.172	
94	-	33.35	4.81	1.67	75	10.50	33.20	5.09	1.28	25.48	252.2	0.240	
139	8.44	33.73	3.33	1.99	100	9.65	33.40	4.71	1.74	25.78	224.2	0.299	
183	8.03	33.89	2.74a)	2.31	150	8.25	33.80	3.16	2.06	26.32	174.2	0.399	
270	7.03	33.91	2.17	2.38	200	7.90	33.90	2.59	2.32	26.45	162.6	0.483	
360	6.10	34.02	1.35	2.63	250	7.35	33.91	2.31	2.36	26.53	154.9	0.563	
449	5.87	34.14	0.62	3.03b)	300	6.65	33.94	1.93	2.44	26.65	143.9	0.637	
540	5.40	34.20	0.38	3.16	400	5.95	34.08	0.89	2.82	26.85	125.7	0.772	
724	4.63	34.33	0.37	3.41	500	5.65	34.18	0.47	3.11	26.97	115.7	0.892	
918	4.12	34.40	0.45	3.51	600	5.10	34.24	0.37	3.24	27.08	105.6	1.003	
1113	3.57	34.45	0.65	3.53	700	4.70	34.31	0.37	3.39	27.18	96.5	1.104	
					800	4.40	34.36	0.41	3.46	27.26	90.2	1.197	
					1000	3.92	34.43	0.51	3.52	27.36	81.1	1.369	
CREST; August 13, 1950; 1339 GCT; 35°06.5'N, 123°51.5'W; sounding, 2,200 fm; wind, 360°, force 6; weather, overcast; sea, high; wire angle, 25°.													70.80
0	16.02	33.12	5.01	0.17	0	16.02	33.12	5.01	0.17	24.32	361.5	0.000	
9	16.02	33.12	4.80	0.19	10	16.02	33.12	4.80	0.19	24.32	361.8	0.036	
22	16.02	33.12	5.44	0.19	20	16.02	33.12	5.43	0.18	24.32	362.1	0.072	
50	11.64	33.04	4.73	0.91	30	16.00	33.11	5.40	0.34	24.32	362.7	0.109	
72	9.42	33.21	4.82	1.27	50	11.64	33.04	4.73	0.91	25.16	283.0	0.173	
98	9.38	33.55	3.01	1.83	75	9.41	33.24	4.80	1.34	25.70	231.8	0.237	
145	8.29	33.87	2.31	2.17	100	9.37	33.64	2.93	1.84	26.02	202.0	0.292	
192	7.76	33.89	-	2.29	150	8.20	33.87	(2.28)	2.19	26.38	168.3	0.384	
285	6.60	33.98	1.82	2.36	200	7.69	33.90	(2.05)	2.30	26.48	159.6	0.466	
383	5.80	33.98	1.15	2.69	250	7.10	33.96	(1.92)	2.33	26.61	147.7	0.543	
476	5.34	34.14	0.69	2.97	300	6.45	33.98	1.75	2.38	26.71	138.3	0.614	
570	4.96	34.22	0.45	3.02	400	5.70	34.00	1.05	2.74	26.82	128.5	0.748	
759	4.44	34.40	0.88r	3.04c)	500	5.22	34.16	0.61	3.01	27.01	111.8	0.868	
960	3.96	34.45	0.62	2.98	600	4.87	34.26	(0.46)	3.02	27.13	101.3	0.974	
1156	3.46	34.42	0.98	2.97	700	4.60	34.36	(0.48)	3.03	27.24	91.6	1.071	
					800	4.33	34.42	(0.50)	3.04	27.31	84.9	1.159	
					1000	3.84	34.45	0.67	2.98	27.39	78.6	1.323	

a) Alternate value, 2.92 ml/L, not used in interpolation.
b) Alternate value, 3.20 µg at/L, not used in interpolation.
c) Alternate value, 3.29 µg at/L, not used in interpolation.

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	OBSERVED					INTERPOLATED					COMPUTED		
	Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ_T	ΔD
	m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
D-1 (70.80)	PAOLINA-T; August 9, 1950; 2203 GCT; 35°12'N, 123°47'W; sounding, 2,300 fm; wind, 340°, force 4; weather, cloudy; sea, rough; wire angle, 16°.												
	0	16.64	33.21	5.01	0.29	0	16.64	33.21	5.01	0.29	24.25	368.8	0.000
	10	16.64	33.22	5.22	0.31	10	16.64	33.22	5.22	0.31	24.25	368.4	0.037
	24	19.61r	33.28	5.30	0.37	20	16.63	33.28	5.29	0.35	24.30	364.0	0.074
	48	10.62	33.19	5.02	1.15	30	16.62	33.26	5.27	0.44	24.29	365.7	0.110
	72	9.90	33.46	5.10	1.42	50	10.52	33.19	5.02	1.17	25.47	253.0	0.172
	96	8.93	33.60	3.63	1.62	75	9.79	33.47	5.08	1.46	25.81	221.1	0.231
	120	8.64	33.77	2.73	1.73	100	8.85	33.62	3.17	1.64	26.08	195.8	0.283
	149	8.16	33.93	2.60	1.66r	150	8.13	33.93	2.59	1.90	26.44	162.9	0.373
	173	7.72	33.98	2.50	1.97	200	7.38	34.02	2.48	1.97	26.62	146.3	0.450
	197	7.42	34.02	2.49	1.97a)	250	6.70	34.02	2.00	2.16	26.71	137.6	0.521
	246	6.76	34.02	2.05	2.14	300	6.26	34.04	1.48	2.51	26.79	131.4	0.588
	295	6.28	34.04	1.52	2.48	400	(6.05)	(34.25)		(2.85)	(26.98)	(114.5)	(0.711)
	349	6.13	34.20	0.93	2.65								
	399	6.05	34.25	–	2.85								
D-2 (70.80)	PAOLINA-T; August 10, 1950; 0416 GCT; 35°12'N, 123°47'W; sounding, 2,300 fm; wind, 340°, force 6; weather, overcast; sea, very rough; wire angle, 12°.												
	0	16.78	33.13			0	16.78	33.13			24.15	377.7	0.000
	10	16.76	33.17			10	16.76	33.17			24.19	374.6	0.038
	24	16.75	33.13			20	16.75	33.13			24.16	377.6	0.075
	53	11.01	33.26			30	16.74	33.13			24.16	377.6	0.113
	77	9.87	33.48			50	11.30	33.24			25.37	262.4	0.177
	82p	9.74	33.49			75	10.00	33.46			25.77	225.1	0.238
	105	8.98	33.78			100	9.11	33.67			26.08	196.0	0.291
	127p	8.40	33.86			150	8.05	33.92			26.44	162.5	0.380
	128	8.38	33.87			200	7.51	33.97			26.56	151.9	0.459
	187p	7.65	33.96			250	6.95	33.99			26.65	143.6	0.533
	270p	6.72	34.00			300	6.42	34.02			26.75	135.0	0.602
	334p	6.15	34.07										
D-3 (70.80)	PAOLINA-T; August 10, 1950; 2237 GCT; 35°12'N, 123°47'W; sounding, 2,300 fm; wind, 330°, force 4; weather, cloudy; sea, very rough; wire angle, 11°.												
	0	16.82	33.19	5.15	0.37	0	16.82	33.19	5.15	0.37	24.19	374.2	0.000
	10	16.77	33.22	5.00	0.35	10	16.77	33.22	5.00	0.35	24.22	371.2	0.037
	24	15.89	33.24	5.27	0.38	20	16.40	33.23	5.25	0.36	24.32	362.6	0.074
	49	10.52	33.37	4.91	1.22	30	13.40	33.25	5.25	0.40	24.98	300.0	0.107
	74	9.63	33.69	3.70	1.63	50	10.51	33.37	4.90	1.24	25.61	239.6	0.161
	99	8.78	33.69	3.15	1.75	75	9.61	33.69	3.69	1.63	26.01	201.9	0.216
	123	8.52	33.91	2.47	1.64r	100	8.77	33.69	3.14	1.76	26.15	189.4	0.265
	153	6.04r	34.02	2.37	2.06	150	8.10	34.02	2.38	2.06	26.51	155.9	0.351
	178	7.63	33.98	2.37	2.05	200	7.30	34.01	2.32	2.05	26.62	145.9	0.427
	203	7.26	34.02	2.30	2.05	250	6.65	34.04	1.93	2.23	26.73	135.9	0.497
	253	6.61	34.04	1.90	2.25	300	6.10	34.07	1.45	2.49	26.83	127.1	0.563
	302	6.08	34.07	1.42	2.50	400	5.87	34.21	0.58	2.79	26.97	115.1	0.684
	358	4.80	34.18	0.94	2.64								
	407	5.90	34.22	0.54	2.82								

a) Alternate value, 2.13 μg at/L, not used in interpolation.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

CREST; August 13, 1950; 0753 GCT; 34°49'N, 124°31.5'W; sounding, 2,300 fm; wind, 360°, force 5; weather, partly cloudy; sea, high; wire angle, 15°. 70.90

0	16.38	33.26	5.57	0.45	0	16.38	33.26	5.57	0.45	24.34	359.1	0.000	
9	16.41	33.30	5.63	0.44	10	16.40	33.30	5.62	0.44	24.37	356.9	0.036	
29	16.34	33.28	5.59	0.53	20	16.39	33.29	5.63	0.48	24.37	357.7	0.072	
57	10.46	33.42	5.01	1.43	30	16.34	33.28	5.58	0.53	24.37	357.9	0.107	
86	9.37	33.68	3.62a)	1.98	50	11.75	33.38	5.27	1.24	25.40	259.8	0.169	
115	8.58	33.82	2.92	2.31	75	9.72	33.57	4.19	1.80	25.90	212.2	0.228	
222p	7.17	34.02	1.68	2.67	100	8.98	33.76	3.24	2.16	26.17	187.1	0.278	
363p	6.16	34.09	0.92	2.98	150	7.97	33.92	2.46	2.47	26.45	161.2	0.365	
490p	5.32	34.20	0.57	3.14	200	7.40	34.00	1.92	2.62	26.60	148.1	0.442	
604p	4.87	34.33	0.34	3.23	250	6.93	34.04	1.47	2.73	26.69	139.5	0.514	
856p	4.06	34.45	0.44	3.27	300	6.55	34.06	1.18	2.85	26.76	133.6	0.582	
1092p	3.42	34.49	0.75	3.17	400	5.91	34.11	0.82	3.03	26.88	123.0	0.710	
1315p	2.95	34.52	0.98	3.12b)	500	5.28	34.21	0.54	3.14	27.04	108.9	0.826	
					600	4.89	34.33	0.35	3.23	27.18	96.3	0.929	
					700	4.52	34.39	0.37	3.25	27.27	88.4	1.021	
					800	4.21	34.43	0.39	3.26	27.33	82.7	1.108	
					1000	3.65	34.48	0.60	3.22	27.43	74.2	1.264	

CREST; August 13, 1950; 0212 GCT; 34°33'N, 125°12'W; sounding, 2,500 fm; wind, 360°, force 5; weather, cloudy; sea, high; wire angle, 42°. 70.100

0	16.70	33.31	4.59	0.37	0	16.70	33.31	4.59	0.37	24.31	362.5	0.000	
7	16.72	33.31	4.71	0.34	10	16.72	33.31	4.90	0.33	24.30	363.2	0.036	
23	16.63	33.31	5.19	0.30	20	16.64	33.31	5.20	0.30	24.32	361.7	0.072	
45	10.41	33.51	3.97	1.36	30	16.40	33.32	5.05	0.36	24.39	356.0	0.108	
67	9.33	33.69	2.92	1.77	50	10.05	33.57	3.70	1.48	25.85	217.0	0.166	
90	8.99	33.77	2.69	1.99	75	9.20	33.72	2.84	1.86	26.11	193.0	0.217	
132	8.36	33.89	2.25	2.14	100	8.85	33.81	2.58	2.03	26.23	181.5	0.264	
172	7.66	33.91	2.19	2.35	150	8.05	33.90	2.20	2.22	26.42	163.9	0.350	
250	6.50	33.95	2.10	2.72	200	7.17	33.92	2.18	2.49	26.57	150.9	0.429	
323	6.01	34.04	1.08	3.09	250	6.50	33.95	2.10	2.72	26.68	140.5	0.502	
403	5.77	34.16	0.68	3.21	300	6.09	34.01	1.44	2.98	26.78	131.4	0.569	
480	5.38	34.22	0.63	3.27	400	5.78	34.16	0.69	3.21	26.94	117.6	0.694	
645	4.45	34.23	0.40	3.32	500	5.29	34.22	0.59	3.28	27.05	108.2	0.806	
822	4.00	34.38	0.35	3.44	600	4.71	34.23	0.44	3.32	27.12	101.8	0.912	
1011	3.48	34.45	0.59	3.42	700	4.30	34.26	0.36	3.35	27.19	95.6	1.011	
					800	4.09	34.35	0.35	3.42	27.28	87.4	1.102	
					1000	3.50	34.45	0.57	3.42	27.42	74.7	1.264	

CREST; August 12, 1950; 2051 GCT; 34°19.5'N, 125°54'W; sounding, 2,530 fm; wind, 340°, force 5; weather, partly cloudy; sea, high; wire angle, 45°. 70.110

0	16.93	33.17	5.42	0.41	0	16.93	33.17	5.42	0.41	24.15	377.3	0.000	
7	16.89	33.26	5.57	0.51	10	16.87	33.24	5.61	0.53	24.22	371.6	0.037	
18	16.10	33.12	5.65	0.56	20	15.65	33.12	5.67	0.57	24.40	354.2	0.074	
39	14.26	33.26	5.76	0.77	30	14.72	33.21	5.75	0.62	24.67	328.5	0.108	
56	12.62	33.19	5.59	1.03	50	13.53	33.20	5.69	0.94	24.91	306.1	0.171	
78	10.78	33.33	4.97	1.43	75	10.95	33.32	5.01	1.38	25.50	250.9	0.241	
114	9.68	33.37	4.52	1.82	100	10.07	33.35	4.68	1.69	25.67	234.6	0.302	
149	8.83	33.71	3.13	2.08	150	8.80	33.73	3.12	2.08	26.18	187.5	0.407	
215	8.10	34.00	1.93	2.31	200	8.23	33.98	2.05	2.24	26.46	161.4	0.494	
284	6.97	34.00	1.83	2.71c)	250	7.64	34.00	1.86	2.49	26.56	152.3	0.572	
353	6.14	34.05	1.18	3.20d)	300	6.74	34.01	1.76	2.86	26.70	139.9	0.646	
425	5.54	34.07	0.90	3.20	400	5.72	34.06	0.97	3.20	26.87	124.3	0.778	
571	4.80	34.20	0.47	3.42	500	5.09	34.13	0.64	3.28	27.00	112.5	0.896	
733	4.30	34.33	0.34	3.41	600	4.69	34.23	0.44	3.42	27.12	101.3	1.003	
914	3.91	34.42	0.46	3.49	700	4.39	34.31	0.36	3.41	27.22	92.8	1.100	
					800	4.15	34.37	0.37	3.43	27.29	86.5	1.190	
					1000	(3.73)	(34.45)			(27.40)	(77.3)	(1.352)	

a) Alternate value, 3.44 ml/L, not used in interpolation.
b) Alternate value, 3.37 μg at/L, not used in interpolation.
c) Alternate value, 2.88 μg at/L, not used in interpolation.
d) Alternate value, 3.32 μg at/L, not used in interpolation.

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OBSERVED					INTERPOLATED					COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m

70.120 CREST; August 12, 1950; 1532 GCT; 33°57'N, 126°34'W; sounding, 2,300 fm; wind, 360°, force 4; weather, cloudy; sea, very rough; wire angle, 18°.

0	17.46	33.10	5.27	0.61	0	17.46	33.10	5.27	0.61	23.97	395.1	0.000
10	17.47	33.10	4.89	0.60	10	17.47	33.10	4.89	0.60	23.97	395.4	0.040
24	17.46	33.06	4.50	0.57	20	17.47	33.08	4.57	0.57	23.95	397.1	0.079
52	13.75	32.88	5.56	0.66	30	17.43	33.02	4.51	0.57	23.92	400.9	0.119
76	12.78	33.04	5.57	0.62u	50	13.95	32.88	5.52	0.66	24.58	337.8	0.193
104	11.27	33.13	4.87	0.82	75	12.79	33.03	5.57	0.68	24.93	304.9	0.273
156	8.92	33.39	4.40	1.50	100	11.56	33.12	4.95	0.80	25.23	276.8	0.346
206	8.56	33.86	3.94	1.74	150	9.10	33.34	4.45	1.47	25.82	221.0	0.470
307	6.79	33.95	2.85	2.23	200	8.60	33.85	3.99	1.72	26.30	176.5	0.570
412	5.96	34.02	1.30	3.26	250	7.95	33.91	3.50	1.91	26.45	163.4	0.655
513	5.24	34.11	0.79	3.49	300	6.88	33.95	2.94	2.18	26.63	146.2	0.732
614	4.78	34.18	0.65	3.55a)	400	6.05	34.01	1.44	3.21	26.79	132.2	0.871
815	4.31	34.36	0.25	3.62	500	5.34	34.10	0.82	3.47	26.94	117.8	0.996
1021	3.70	34.38	0.58	3.75	600	4.82	34.17	0.68	3.54	27.06	107.3	1.109
1223	3.20	34.45	0.65	3.63	700	4.53	34.26	0.40	3.56	27.16	98.2	1.211
					800	4.35	34.35	0.26	3.61	27.25	90.3	1.306
					1000	3.76	34.38	0.56	3.74	27.34	82.9	1.479

70.130 CREST; August 12, 1950; 0715 GCT; 33°35'N, 127°14.5'W; sounding, 2,500 fm; wind, 360°, force 4; weather, overcast; sea, very rough; wire angle, 20°.

0	18.87	32.99	5.11	0.30	0	18.87	32.99	5.11	0.30	23.54	435.7	0.000
10	18.87	33.00	5.16	0.39	10	18.87	33.00	5.16	0.39	23.55	435.3	0.044
24	18.85	33.03	5.17	0.47	20	18.85	33.00	5.17	0.45	23.55	435.2	0.087
52	14.67	32.99	6.01	0.56	30	18.70	33.00	5.23	0.50	23.59	431.9	0.130
75	13.95	33.12	5.81	0.48	50	15.25	32.99	6.00	0.56	24.39	356.1	0.209
103	11.60	32.90	5.73	0.64	75	13.95	33.12	5.81	0.48	24.77	320.8	0.294
153	9.65	33.19	5.12	0.95	100	11.70	32.90	5.73	0.63	25.04	295.4	0.371
203	8.57	33.77	4.34	1.56	150	9.75	33.18	5.16	0.94	25.59	243.0	0.505
302	6.94	33.98	2.74	2.16	200	8.61	33.76	4.39	1.52	26.23	183.4	0.612
407	5.59	34.00	1.52	2.76b)	250	7.75	33.91	3.61	1.84	26.48	160.5	0.698
508	5.01	34.09	0.74	3.05	300	6.98	33.98	2.78	2.15	26.64	145.3	0.774
610	4.66	34.20	0.46	3.22	400	5.65	34.00	1.58	2.73	26.83	127.9	0.911
812	4.12	34.34	0.38	3.32	500	5.05	34.08	0.78	3.03	26.96	115.7	1.033
1017	3.54	34.40	0.60	3.33	600	4.70	34.19	0.46	3.20	27.09	104.4	1.143
1217	3.15	34.47	0.84	3.18	700	4.40	34.27	0.40	3.28	27.19	95.9	1.243
					800	4.15	34.33	0.38	3.32	27.26	89.4	1.336
					1000	3.58	34.40	0.57	3.34	27.37	79.3	1.504

73.51 CREST; August 14, 1950; 1128 GCT; 35°29.5'N, 121°14'W; sounding, 194 fm; wind, 320°, force 1, weather, fog; sea, rough; wire angle, 6°.

0	12.82	33.42	3.95	0.99	0	12.82	33.42	3.95	0.99	25.23	275.2	0.000
10	12.24	33.44	4.38	1.05	10	12.24	33.44	4.38	1.05	25.35	263.7	0.027
25	11.40	33.39	4.62	1.09	20	11.80	33.40	4.62	1.08	25.41	258.6	0.053
49	9.76	33.57	3.57	1.65	30	10.97	33.40	4.57	1.12	25.56	244.4	0.078
72	9.16	33.82	2.68	1.96	50	9.75	33.60	3.55	1.66	25.92	210.0	0.124
96	8.58	33.84	2.73r	2.00	75	9.05	33.82	2.62	1.97	26.21	183.3	0.173
150	8.52	34.05	1.69	2.35	100	8.55	33.85	2.25	2.01	26.31	174.0	0.217
199	8.20	34.11	1.38	-	150	8.52	34.05	1.69	2.35	26.47	159.3	0.300
249	8.12	34.11	1.24	2.56	200	8.20	34.11	1.37	2.47	26.57	151.3	0.379
					250	(8.12)	(34.11)	(1.24)	(2.56)	(26.58)	(151.0)	(0.454)

a) Alternate value, 3.72 μg at/L, not used in interpolation.
b) Alternate value, 3.11 μg at/L, not used in interpolation.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

CREST; August 14, 1950; 1607 GCT; 34°52.5'N, 121°08.5'W; sounding, 310 fm; wind, 320°, force 5; weather, cloudy; sea, high; wire angle, 8°. 77.55

0	15.14	33.40	5.69	0.61	0	15.14	33.40	5.69	0.61	24.73	322.7	0.000
10	14.65	33.39	5.61	0.65	10	14.65	33.39	5.61	0.65	24.83	313.4	0.032
25	12.41	33.44	5.29	1.02	20	13.10	33.42	5.42	0.90	25.17	281.0	0.062
49	10.15	33.48	4.38	1.66	30	12.00	33.45	5.08	1.16	25.41	258.7	0.089
74	9.64	33.69	3.30	2.01	50	10.10	33.49	4.36	1.68	25.78	223.7	0.137
98	9.10	33.87	2.53	2.30	75	9.63	33.70	3.21	2.02	26.02	201.2	0.190
153	8.69	34.03	1.95	2.45	100	9.05	33.88	2.46	2.31	26.25	179.3	0.237
202	8.38	34.07	1.83	2.55	150	8.70	34.03	1.95	2.45	26.42	163.8	0.323
251	8.15	34.14	1.36	2.56	200	8.39	34.07	1.85	2.55	26.51	157.1	0.404
299	7.92	34.18	1.15	2.66	250	8.16	34.14	1.37	2.56	26.60	149.3	0.480
353	7.52	34.16	1.08	2.70	300	7.91	34.18	1.14	2.66	26.66	143.8	0.554
401	6.46	34.13	1.29	2.82	400	6.46	34.13	1.29	2.82	26.83	128.6	0.689
450	6.70	34.20	0.69	2.84	500	(6.55)	(34.23)	(0.53)	(2.91)	(26.89)	(123.9)	(0.815)
499	6.55	34.23	0.53	2.91								

CREST; August 14, 1950; 2111 GCT; 34°19'N, 120°48'W; sounding, 425 fm; wind, 320°, force 1; weather, haze; sea, very rough; wire angle, 27°. 80.55

0	14.71	33.49	4.94	0.66	0	14.71	33.49	4.94	0.66	24.89	307.0	0.000
9	14.38	33.44	5.30	0.57	10	14.37	33.44	5.29	0.56	24.93	304.1	0.031
22	14.13	33.64	4.65	0.70	20	14.17	33.64	4.65	0.68	25.12	285.7	0.060
45	11.08	33.19	4.81	0.97	30	14.02	33.59	4.71	0.78	25.11	286.6	0.089
67	10.88	33.55	3.95	1.32	50	11.01	33.19	4.77	1.02	25.39	261.0	0.143
89	10.02	33.64	3.00	1.67	75	10.74	33.59	3.48	1.50	25.74	227.4	0.204
137	8.99	33.93	2.34	2.08	100	9.73	33.70	2.77	1.82	26.00	203.3	0.258
177	8.74	34.00	2.09	2.19	150	8.89	33.96	2.28	2.12	26.34	171.9	0.352
215	8.30	34.13	1.64	2.26a)	200	8.48	34.07	1.84	2.23	26.49	158.5	0.434
252	7.98	34.14	1.29	2.37	250	8.00	34.14	1.26	2.36	26.62	147.1	0.511
297	7.54	34.22	0.97	2.48b)	300	7.51	34.22	0.94	2.49	26.75	134.9	0.581
341	7.12	34.25	0.72	2.56	400	6.69	34.24	0.63	2.60	26.88	123.6	0.710
386	6.76	34.25	0.66	2.57	500	6.31	34.29	0.44	2.81	26.97	116.2	0.830
433	6.62	34.23	0.59	2.68								
531	6.11	34.33	0.42	2.86								

CREST; August 14, 1950; 2335 GCT; 34°09'N, 121°09'W; sounding, 1,050 fm; wind, 320°, force 2; weather, clear; sea, very rough; wire angle, 15°. 80.60

0	16.03	33.30	5.49	0.56	0	16.03	33.30	5.49	0.56	24.45	348.6	0.000
10	15.92	33.31	5.63	0.55	10	15.92	33.31	5.63	0.55	24.49	345.8	0.035
24	14.96	33.30	5.90	0.59	20	15.65	33.30	5.84	0.58	24.54	341.0	0.069
48	12.89	33.04	5.96	0.77	30	14.32	33.24	5.94	0.62	24.78	318.2	0.102
72	12.19	33.39	5.13	1.16	50	12.78	33.04	5.94	0.80	24.94	303.6	0.164
95	10.98	33.58	4.06	1.65	75	12.08	33.43	4.95	1.22	25.38	262.7	0.235
145	9.20	33.82	2.77	2.18	100	10.70	33.62	3.87	1.72	25.78	225.1	0.296
190	8.57	33.98	2.27	2.34	150	9.12	33.84	2.70	2.21	26.21	184.3	0.399
269	7.00	34.02	1.90	2.45	200	8.44	34.00	2.20	2.36	26.44	163.1	0.485
370	6.05	34.02	1.47	2.79	250	7.50	34.02	1.95	2.42	26.60	148.8	0.563
461	5.82	34.16	0.61	3.12	300	6.53	34.02	1.80	2.52	26.73	136.3	0.634
558	5.60	34.29	0.32	3.44	400	5.97	34.05	1.25	2.90	26.83	128.2	0.769
754	4.68	34.36	0.41	3.57	500	5.75	34.23	0.40	3.27	27.00	113.3	0.887
951	4.17	34.40	0.53	3.43	600	5.44	34.31	0.35	3.50	27.10	104.6	0.996
1155	3.57	34.47	0.75	3.38	700	4.95	34.35	0.39	3.56	27.19	96.6	1.097
					800	4.54	34.37	0.43	3.51	27.25	91.2	1.191
					1000	4.02	34.41	0.57	3.42	27.34	83.7	1.366

a) Alternate value, 2.40 μg at/L, not used in interpolation.
b) Alternate value, 2.34 μg at/L, not used in interpolation.

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OBSERVED					INTERPOLATED					COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m
80.70	CREST; August 15, 1950; 0714 GCT; 33°49'N, 121°47.5'W; sounding, 1,950 fm; wind, 320°, force 4; weather, clear; sea, very rough; wire angle, 22°.											
0	16.13	33.40	4.59	0.43	0	16.13	33.40	4.59	0.43	24.51	343.4	0.000
10	16.13	33.44	5.08	0.45	10	16.13	33.44	5.08	0.45	24.54	340.8	0.034
24	16.10	33.40	5.26	0.42	20	16.10	33.42	5.22	0.42	24.53	341.9	0.068
51	10.96	33.10	5.32	0.91	30	16.05	33.34	5.30	0.47	24.48	347.0	0.103
75	10.32	33.24	4.23	1.13	50	11.05	33.10	5.32	0.90	25.31	268.3	0.164
101	8.90	33.60	3.25	1.87	75	10.32	33.24	4.23	1.13	25.55	246.3	0.229
150	7.92	33.93	2.88	2.05	100	8.95	33.58	3.26	1.87	26.04	200.0	0.284
197	7.46	34.00	2.14	2.26	150	7.92	33.93	2.88	2.05	26.47	159.9	0.374
292	7.03	34.14	0.96	2.50	200	7.45	34.00	2.08	2.27	26.59	148.8	0.451
391	6.33	34.20	0.57	2.78	250	7.18	34.07	1.32	2.41	26.68	140.6	0.524
488	5.76	34.27	0.40	2.98a)	300	6.98	34.15	0.90	2.52	26.77	132.7	0.592
586	5.20	34.27	0.37	3.06	400	6.27	34.21	0.55	2.79	26.92	120.2	0.718
779	4.30	34.36	0.34	3.18	500	5.68	34.27	0.39	3.00	27.04	109.4	0.833
978	3.84	34.45	0.55	3.19	600	5.12	34.27	0.37	3.07	27.10	103.6	0.940
1173	3.33	34.49	0.77	3.13	700	4.61	34.31	0.35	3.14	27.19	95.5	1.039
					800	4.25	34.37	0.34	3.18	27.28	87.7	1.131
					1000	3.79	34.46	0.60	3.18	27.40	77.3	1.296
80.80	CREST; August 15, 1950; 1234 GCT; 33°28.5'N, 122°26.5'W; sounding, 2,100 fm; wind, 320°, force 4; weather, clear; sea, very rough; wire angle, 39°.											
0	15.95	33.21	5.58	0.43	0	15.95	33.21	5.58	0.43	24.40	353.4	0.000
8	15.95	33.19	5.63	0.50	10	15.95	33.19	5.63	0.51	24.39	355.2	0.035
20	15.93	33.21	5.64	0.56	20	15.93	33.21	5.64	0.56	24.41	353.6	0.071
43	13.27	33.03	5.92	0.75	30	15.82	33.15	5.80	0.65	24.39	355.9	0.106
63	11.54	32.97	5.82	0.94	50	12.50	32.99	5.92	0.80	24.96	302.1	0.172
85	10.50	33.13	5.37	1.39	75	10.92	33.03	5.62	1.20	25.28	271.8	0.244
123	9.04	33.55	3.94	1.82	100	9.90	33.34	4.47	1.58	25.69	232.6	0.307
158	8.33	33.78	3.53	2.12	150	8.46	33.74	3.64	2.04	26.24	181.7	0.411
221	7.67	34.00	2.11	2.44	200	7.83	33.97	2.35	2.35	26.51	156.4	0.495
285	6.85	34.04	1.89	2.69	250	7.37	34.02	1.99	2.56	26.62	147.0	0.570
347	6.38	34.09	1.00	2.72	300	6.69	34.05	1.77	2.71	26.73	136.2	0.642
411	5.98	34.16	0.65	-	400	6.05	34.15	0.69		26.90	121.8	0.771
543	5.32	34.23	0.37	-	500	5.50	34.21	0.43		27.01	111.6	0.887
696	4.59	34.33	0.31	-	600	5.07	34.26	0.32		27.10	103.7	0.995
872	4.15	34.40	0.48	-	700	4.57	34.33	0.31		27.21	93.5	1.094
					800	4.30	34.38	0.37		27.28	87.5	1.184
					1000	(3.80)	(34.44)			(27.38)	(78.9)	(1.350)
80.90	CREST; August 15, 1950; 1849 GCT; 33°09'N, 123°05.5'W; sounding, 2,340 fm; wind, 360°, force 4; weather, overcast; sea, very rough; wire angle, 16°.											
0	17.32		4.97	0.51	0	17.32		4.97	0.51			
10	17.34		4.94	0.46	10	17.34		4.94	0.46			
24	17.31		5.14	0.40	20	17.32		5.12	0.41			
53	13.60		5.12	0.36	30	17.25		5.14	0.39			
77	11.94		5.24	0.62	50	14.00		5.12	0.36			
105	10.59		4.73	0.87	75	12.05		5.23	0.60			
157	9.24		3.68	1.58	100	10.78		4.89	0.84			
209	8.26		2.97	1.93	150	9.38		3.78	1.51			
309	7.10		2.10	2.19	200	8.40		3.07	1.89			
413	5.78		1.24	2.45	250	7.75		2.56	2.03			
514	5.50		0.55	2.87	300	7.20		2.17	2.16			
615	4.76		0.37	2.97	400	5.84		1.35	2.42			
818	4.22		0.33	3.08	500	5.52		0.60	2.80			
1025	3.56		0.57	3.10	600	4.89		0.38	2.96			
1226	3.16		0.81	3.07	700	4.45		0.35	3.02			
					800	4.25		0.34	3.07			
					1000	3.63		0.53	3.10			

a) Mean value of 2.89 and 3.08 μg at/L.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

CREST; August 16, 1950; 0004 GCT; 32°48.5'N, 123°44'W; sounding, 2,300 fm; wind, 320°, force 3; weather, overcast; sea, rough; wire angle, 12°. 80.100

0	17.73	33.04	5.42	0.57	0	17.73	33.04	5.42	0.57	23.86	405.1	0.000
10	17.50	33.03	5.36	0.57	10	17.50	33.03	5.36	0.57	23.91	401.1	0.040
24	16.93	33.12	5.59	0.59	20	17.10	33.02	5.47	0.58	23.99	393.1	0.080
49	14.49	33.01	5.80	0.71	30	16.55	33.02	5.70	0.61	24.12	381.2	0.119
73	11.74	32.92	5.76	0.87	50	14.25	33.01	5.80	0.71	24.62	334.2	0.190
97	10.49	33.03	5.44	1.15	75	11.55	32.92	5.75	0.88	25.08	290.8	0.268
150	9.08	33.55	3.78	1.99	100	10.40	33.05	5.35	1.19	25.38	262.2	0.337
198	8.39	33.84	-	2.27	150	9.08	33.55	3.78	1.99	25.99	205.1	0.454
292	7.16	33.98	2.04	2.64	200	8.36	33.85	3.02	2.28	26.34	173.0	0.549
389	6.01	34.04	1.32	2.91	250	7.72	33.93	2.47	2.51	26.50	158.6	0.632
483	5.26	34.14	0.79	3.23a)	300	7.04	33.99	1.97	2.66	26.64	145.4	0.708
581	4.88	34.23	0.41	3.54	400	5.90	34.05	1.25	2.95	26.84	127.3	0.844
775	4.33	34.34	0.35	3.67	500	5.15	34.16	0.70	3.28	27.01	111.0	0.963
968	3.76	34.42	0.56	3.79	600	4.84	34.25	0.39	3.56	27.12	101.6	1.069
1170	3.31	34.49	0.79	3.71	700	4.57	34.30	0.34	3.64	27.19	95.7	1.168
					800	4.25	34.35	0.37	3.69	27.27	89.1	1.260
					1000	3.67	34.43	0.60	3.78	27.39	78.1	1.428

CREST; August 16, 1950; 0530 GCT; 32°28'N, 124°23'W; sounding, 2,440 fm; wind, 340°, force 2; weather, drizzle; sea, rough; wire angle, 6°. 80.110

0	18.14	33.09	4.81	0.45	0	18.14	33.09	4.81	0.45	23.80	411.0	0.000
10	18.14	33.12	4.99	0.51	10	18.14	33.12	4.99	0.51	23.82	409.4	0.041
25	17.97	33.09	4.72	0.56	20	18.02	33.10	4.75	0.55	23.83	408.3	0.082
49	15.01	33.10	5.13	0.55	30	17.95	33.09	4.74	0.56	23.84	407.7	0.123
74	13.35	33.01	5.28	0.55	50	14.90	33.10	5.16	0.55	24.55	340.8	0.198
99	12.19	33.06	4.87	0.71	75	13.30	33.01	5.27	0.55	24.81	316.3	0.280
153	9.44	33.35	4.14	1.39	100	12.10	33.06	4.85	0.72	25.09	290.8	0.356
202	8.80	33.72	3.51	1.83	150	9.62	33.33	4.18	1.37	25.73	229.8	0.485
298	7.31	33.96	2.79	2.30	200	8.83	33.71	3.54	1.81	26.16	190.4	0.591
400	5.91	33.99	1.57	2.63	250	8.12	33.87	3.10	2.10	26.39	168.8	0.681
497	5.60	34.13	0.62	3.09	300	7.25	33.96	2.77	2.30	26.59	150.5	0.760
599	5.18	34.23	0.40	3.26	400	5.91	33.99	1.57	2.63	26.79	132.0	0.902
799	4.24	34.34	0.30	3.16	500	5.59	34.13	0.60	3.10	26.94	118.8	1.027
995	3.74	34.43	0.58	3.15	600	5.16	34.23	0.40	3.26	27.07	107.0	1.140
1197	3.26	34.47	0.73	3.06	700	4.65	34.28	0.33	3.20	27.17	98.2	1.243
					800	4.23	34.34	0.30	3.16	27.26	89.8	1.336
					1000	3.74	34.43	0.60	3.15	27.38	78.9	1.505

CREST; August 16, 1950; 1040 GCT; 32°07'N, 125°03'W; sounding, 2,200 fm; wind, 320°, force 2; weather, drizzle; sea, rough; wire angle, 8°. 80.120

0	18.44	33.19	5.29	0.63	0	18.44	33.19	5.29	0.63	23.80	411.0	0.000
9	18.45	33.19	5.26	0.71	10	18.45	33.19	5.26	0.71	23.80	411.5	0.041
24	18.25	33.13	5.28	0.66	20	18.30	33.13	5.27	0.68	23.79	412.7	0.082
49	15.53	33.19	5.83	0.54	30	18.20	33.13	5.37	0.63	23.81	410.7	0.124
74	14.58	33.13	5.83	0.40	50	15.50	33.19	5.83	0.53	24.49	346.7	0.199
98	12.94	33.04	5.69	0.65	75	14.57	33.12	5.82	0.42	24.64	333.3	0.284
152	10.30	33.28	4.97	1.20	100	12.75	33.04	5.68	0.67	24.95	304.2	0.364
200	8.78	33.73	3.84	1.80	150	10.40	33.25	5.05	1.18	25.54	248.4	0.502
296	7.32	33.96	2.65	2.44	200	8.78	33.73	3.84	1.80	26.18	188.1	0.611
395	6.39	34.05	1.39	2.72	250	7.93	33.88	3.29	2.20	26.43	165.3	0.700
490	5.43	34.07	0.88	3.23	300	7.29	33.97	2.58	2.46	26.59	150.3	0.778
590	4.76	34.21	0.57	3.76	400	6.33	34.05	1.37	2.73	26.78	132.9	0.920
787	4.14	34.33	0.41	3.86	500	5.32	34.07	0.84	3.32	26.92	119.8	1.046
981	3.64	34.39	0.60	3.84	600	4.72	34.22	0.55	3.78	27.11	102.4	1.158
1185	3.25	34.42	0.91	3.92	700	4.40	34.29	0.43	3.85	27.20	94.4	1.256
					800	4.10	34.34	0.41	3.86	27.27	88.1	1.347
					1000	3.60	34.40	0.64	3.84	27.37	79.5	1.515

a) Mean value of 3.11 and 3.34 μg at/L.

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

80.130 CREST; August 16, 1950; 1605 GCT; 31°45.5'N, 125°41.5'W; sounding, 2,310 fm; wind, 340°, force 3; weather, rain; sea, rough; wire angle, 20°.

0	18.60	33.43	5.05	0.48	0	18.60	33.43	5.05	0.48	23.94	397.3	0.000
10	18.58	33.43	5.03	0.44	10	18.58	33.43	5.03	0.44	23.95	397.2	0.040
24	18.79	33.63	4.60	0.43	20	18.78	33.55	4.65	0.43	23.99	393.5	0.079
47	18.14	33.78	5.07	0.42	30	18.73	33.72	4.70	0.42	24.13	380.3	0.118
70	16.88	33.62	5.14	0.38	50	18.05	33.78	5.09	0.42	24.35	360.5	0.192
94	15.96	33.68	5.00	0.45	75	16.65	33.64	5.14	0.38	24.57	339.6	0.280
144	12.05	33.51	4.78	0.70	100	15.67	33.68	4.97	0.47	24.83	316.0	0.361
189	10.24	33.71	4.23	1.32	150	11.75	33.52	4.75	0.75	25.51	251.8	0.503
276	8.05	33.98	2.88	1.94	200	9.84	33.76	4.05	1.47	26.03	202.6	0.617
368	6.92	34.00	1.95	2.16	250	8.55	33.93	3.25	1.81	26.37	170.8	0.711
457	5.90	34.07	1.39	2.55	300	7.73	33.99	2.62	2.01	26.54	155.1	0.792
551	5.22	34.10	0.78	2.98	400	6.54	34.02	1.74	2.28	26.73	137.9	0.938
739	4.34	34.23	0.35	3.24	500	5.58	34.09	1.10	2.79	26.91	121.5	1.068
925	3.96	34.42	0.41	3.28	600	4.95	34.12	0.60	3.06	27.01	112.6	1.185
1125	3.40	34.43	0.73	3.21	700	4.47	34.19	0.38	3.19	27.11	102.7	1.292
					800	4.20	34.30	0.35	3.28	27.23	92.3	1.390
					1000	3.77	34.43	0.52	3.27	27.38	79.3	1.562

83.60 PAOLINA-T; August 12, 1950; 1645 GCT; 33°34'N, 120°49'W; sounding, 1,600 fm; wind, 330°, force 2; weather, overcast; sea, very rough; wire angle, 12°.

0	14.3	33.53	5.33	0.48	0	14.3	33.53	5.33	0.48	25.01	296.2	0.000
10	14.11	33.57	5.34	0.52	10	14.11	33.57	5.34	0.52	25.08	289.5	0.029
24	13.41	33.57	4.85	0.89	20	13.75	33.57	4.95	0.70	25.15	283.0	0.058
48	10.42	33.33	4.64	1.23	30	11.80	33.55	4.77	1.00	25.52	248.0	0.084
73	9.99	33.60	3.49	1.53	50	10.35	33.33	4.62	1.25	25.61	239.4	0.133
97	9.64	33.78	2.82	1.79	75	9.94	33.62	3.40	1.55	25.90	212.6	0.190
151	8.50	34.04	2.51	2.11	100	9.59	33.80	2.79	1.82	26.10	194.0	0.241
200	7.76	34.07	2.11	2.26	150	8.51	34.04	2.52	2.10	26.46	160.5	0.329
297	-	34.14	1.31	2.62a)	200	7.76	34.07	2.11	2.26	26.60	147.9	0.407
400	6.60	34.23	0.62	2.93	250	7.34	34.11	1.68	2.43	26.69	140.1	0.478
498	6.02	34.29	0.47	3.02	300	7.04	34.14	1.29	2.63	26.76	134.4	0.547
601	5.48	34.33	0.42	3.08	400	6.60	34.23	0.62	2.93	26.89	122.9	0.675
801	4.63	34.40	0.42	3.11	500	6.01	34.29	0.47	3.03	27.01	112.6	0.794
998	4.04	34.43	0.52	3.06	600	5.49	34.33	0.42	3.08	27.11	103.9	0.902
1201	3.48	34.51	0.85	2.96	700	5.03	34.37	0.42	3.10	27.19	96.5	1.002
					800	4.64	34.40	0.42	3.11	27.26	90.2	1.095
					1000	4.03	34.43	0.52	2.96	27.35	82.6	1.268

83.70 PAOLINA-T; August 12, 1950; 2311 GCT; 33°14.5'N, 121°26'W; sounding, 2,100 fm; wind, 330°, force 4; weather, overcast; sea, very rough; wire angle, 19°.

0	16.3	33.35	5.34	0.40	0	16.3	33.35	5.34	0.40	24.43	351.1	0.000
10	15.93	33.39	5.33	0.43	10	15.93	33.39	5.33	0.43	24.55	340.6	0.035
24	15.85	33.35	5.10	0.42	20	15.88	33.37	5.13	0.42	24.54	341.1	0.069
47	12.22	33.10	5.09	0.78	30	15.84	33.25	5.10	0.46	24.46	349.3	0.103
70	10.52	33.13	4.68	1.18	50	11.70	33.10	5.08	0.81	25.19	279.9	0.166
92	9.74	33.39	4.33	1.54	75	10.30	33.16	4.59	1.26	25.49	252.2	0.233
184	9.08	33.58	3.61	1.69	100	9.63	33.41	4.24	1.57	25.79	223.3	0.292
271	-	34.11	1.83	2.36	150	9.24	33.51	3.90	1.65	25.93	210.8	0.401
364	6.45	34.18	1.27	2.65	200	(8.96)	33.85	3.32	1.77	(26.25)	(182.0)	(0.499)
453	5.57	34.22	0.70	2.90	250	(8.42)	34.07	2.23	2.17	(26.50)	(158.4)	(0.584)
549	4.93	34.29	0.59	3.04	300	(7.55)	34.14	1.56	2.47	(26.69)	(141.2)	(0.659)
746	4.55	34.51	0.44	-	400	6.03	34.20	1.07	2.76	26.94	117.9	(0.788)
942	3.92	34.49	0.62	3.08	500	5.23	34.25	0.65	2.99	27.08	105.4	(0.900)
1146	3.45	34.52	0.81	2.73	600	4.78	34.36	0.55	(3.05)	27.22	92.8	(0.999)
					700	4.60	34.50	0.46	(3.07)	27.35	81.4	(1.086)
					800	4.40	34.51	0.49	(3.08)	27.38	79.2	(1.166)
					1000	3.77	34.49	0.66	3.04	27.43	75.1	(1.321)

a) Mean value of 2.46 and 2.77 μg at/L.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

PAOLINA-T; August 13, 1950; 1835 GCT; 33°28'N, 119°46'W; sounding, 63 fm; wind, 330°, force 2; weather, overcast; sea, rough; wire angle, 0°. 86.50

0	16.29	33.60	5.31	0.49	0	16.29	33.60	5.31	0.49	24.63	332.6	0.000	
10	16.27	33.66	5.02	0.49	10	16.27	33.66	5.02	0.49	24.68	328.1	0.033	
25	16.27	33.57	5.08	0.50	20	16.27	33.58	5.06	0.49	24.61	334.3	0.066	
50	10.86	33.57	4.02	1.67r	30	16.25	33.57	5.06	0.52	24.61	334.9	0.100	
75	10.12	33.58	3.78	1.60	50	10.86	33.57	4.02	1.18	25.71	230.6	0.156	
					75	10.12	33.58	3.78	1.60	25.85	218.1	0.212	

PAOLINA-T; August 13, 1950; 1228 GCT; 33°00'N, 120°21.5'W; sounding, 520 fm; wind, 330°, force 4; weather, overcast; sea, very rough; wire angle, 27°. 87.60

0	15.90	33.60	5.81	0.41	0	15.90	33.60	5.81	0.41	24.71	324.2	0.000	
9	15.75	33.60	5.67	0.43	10	15.75	33.60	5.68	0.44	24.75	321.4	0.032	
22	15.74	33.58	5.80	0.46	20	15.74	33.58	5.77	0.46	24.74	322.7	0.064	
44	15.62	33.58	5.68	0.45	30	15.73	33.58	5.77	0.46	24.74	322.9	0.097	
66	10.88	33.15	5.69	1.03	50	15.00	33.58	5.68	0.46	24.90	308.1	0.160	
88	10.00	33.37	5.08	1.28	75	10.48	33.17	5.61	1.15	25.46	254.3	0.230	
155p	8.29	33.91	3.34	1.86	100	7.60	33.44	4.50	1.39	25.82	220.6	0.290	
212p	7.72	34.02	-	2.07	150	8.39	33.75	3.37	1.82	26.26	179.9	0.390	
264p	7.44	34.05	2.28	1.79r	200	7.82	34.01	2.88	2.02	26.55	153.3	0.473	
312p	6.52	34.13	1.77	2.53	250	7.50	34.04	2.42	2.21	26.62	147.2	0.548	
360p	6.62	34.25	1.08	2.78	300	6.65	34.10	1.91	2.47	26.78	132.1	0.618	
481p	6.26	34.40	0.45	2.91	400	6.59	34.31	0.85	2.86	26.95	117.0	0.742	
					500	(6.17)	(34.41)	(0.45)	(2.92)	(27.09)	(105.4)	(0.854)	

PAOLINA-T; August 13, 1950; 0550 GCT; 32°39.5'N, 121°02'W; sounding, 2,150 fm; wind, 320°, force 4; weather, overcast; sea, very rough; wire angle, 30°. 87.70

0	16.70	33.33	4.57	0.51	0	16.70	33.33	4.57	0.51	24.32	361.2	0.000	
9	16.58	33.28	5.45	0.51	10	16.57	33.28	5.45	0.51	24.32	361.9	0.036	
22	16.48	33.30	5.30	0.50	20	16.49	33.30	5.32	0.50	24.35	359.4	0.072	
47	13.42	33.19	5.88	0.67	30	16.44	33.29	5.33	0.51	24.35	359.5	0.108	
68	11.62	33.15	5.64	0.92	50	12.90	33.18	5.88	0.71	25.03	295.2	0.173	
93	10.25	33.28	5.00	-	75	11.25	33.15	5.51	1.03	25.31	268.8	0.244	
138	8.96	33.78	3.16	1.90	100	9.95	33.44	4.55	1.55	25.76	226.3	0.306	
184	8.11	33.96	2.70	2.05	150	8.71	33.84	3.02	1.95	26.28	177.0	0.407	
274	6.97	34.07	1.82	2.40	200	7.87	33.99	2.56	2.10	26.53	155.3	0.489	
369	6.27	34.22	1.05	2.74	250	7.23	34.05	2.13	2.28	26.66	142.9	0.565	
460	5.84	34.33	-	2.89	300	6.75	34.10	1.56	2.50	26.76	133.6	0.633	
553	5.42	34.34	0.37	3.01	400	6.10	34.27	0.85	2.80	26.99	113.6	0.757	
738	4.69	34.47	0.37	3.14	500	5.66	34.34	0.41	2.94	27.09	104.2	0.866	
930	4.04	34.49	0.63	3.09	600	5.20	34.36	0.37	3.05	27.17	98.1	0.967	
1121	3.45	34.52	-	3.05	700	4.82	34.43	0.37	3.13	27.27	89.3	1.060	
					800	4.46	34.49	0.42	3.13	27.36	81.3	1.146	
					1000	3.81	34.50		3.07	27.43	75.0	1.301	

CREST; August 19, 1950; 0837 GCT; 33°24'N, 117°54.5'W; sounding, 341 fm; wind, 320°, force 1; weather, fog; sea, moderate; wire angle, 3°. 90.30

0	17.81	33.51	5.55	0.54	0	17.81	33.51	5.55	0.54	24.20	373.0	0.000	
10	16.80	33.51	5.88	0.56	10	16.80	33.51	5.88	0.56	24.44	350.4	0.036	
25	13.19	33.46	6.80	0.56	20	13.95	33.49	5.75	0.56	25.05	292.3	0.068	
50	10.55	33.44	4.81	1.45	30	12.50	33.45	5.48	0.61	25.31	267.8	0.096	
75	10.24	33.51	4.10	1.68	50	10.55	33.44	4.81	1.45	25.66	235.0	0.147	
100	9.48	33.62	3.69	1.87	75	10.24	33.51	4.10	1.68	25.77	225.2	0.204	
154	8.67	33.89	2.72	2.02	100	9.48	33.62	3.69	1.87	25.98	205.2	0.258	
202	8.32	34.05	2.01	2.31	150	8.72	33.88	2.80	2.01	26.31	175.2	0.353	
250	8.45	34.20	1.24	2.62	200	8.35	34.04	2.03	2.29	26.49	158.7	0.436	
298	7.78	34.14	1.24	3.14r	250	8.45	34.20	1.24	2.62	26.60	149.3	0.514	
351	7.79	-	0.86	3.06	300	7.78	(34.13)	1.24	2.85	(26.64)	(145.5)	(0.587)	
399	7.16	-	0.80	3.25	400	7.15		0.80	(3.25)				
447	6.77	-	0.54	-	500	(6.50)		(0.47)					
496	6.52	-	0.47	-									

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OBSERVED					INTERPOLATED					COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m
90.37	CREST; August 19, 1950; 0330 GCT; 33°11'N, 118°23.5'W; sounding, 650 fm; wind, 320°, force 3; weather, haze; sea, rough; wire angle, 22°.											
0	18.93	33.58	4.82	0.39	0	18.93	33.58	4.82	0.39	23.97	394.5	0.000
9	18.89	33.58	4.88	0.39	10	18.87	33.58	4.90	0.39	23.99	393.2	0.039
23	15.15	33.46	5.17	0.51	20	17.25	33.46	5.16	0.47	24.29	364.5	0.077
46	11.85	33.44	4.94	1.09	30	13.50	33.45	5.16	0.61	25.11	286.7	0.110
68	11.10	33.58	4.30	1.36	50	11.65	33.45	4.79	1.18	25.47	252.9	0.164
91	10.73	33.58	3.91	1.46	75	10.98	33.58	4.17	1.39	25.69	232.3	0.224
138	9.19	33.87	2.49	1.79	100	10.47	33.59	3.74	1.49	25.79	223.5	0.281
180	9.11	34.09	1.94	2.00	150	9.15	34.00	2.19	1.75	26.33	172.9	0.381
265	7.82	34.14	1.28	2.45	200	8.87	34.11	1.78	2.14	26.46	161.4	0.464
356	7.33	34.23	0.72	2.86	250	8.04	34.14	1.38	2.38	26.61	147.6	0.542
445	6.74	34.23	0.47	3.02	300	7.58	34.17	1.04	2.59	26.70	139.6	0.613
538	6.16	34.31	0.38	3.13	400	7.08	34.23	0.56	2.95	26.82	129.7	0.748
630	5.52	34.31	0.25	3.11	500	6.40	34.28	0.42	3.10	26.95	118.1	0.872
727	5.14	34.34	0.26	3.21	600	5.74	34.31	0.28	3.11	27.06	108.5	0.985
918	4.48	34.36	0.35	3.20	700	5.23	34.33	0.25	3.19	27.14	101.6	1.090
					800	4.91	34.35	0.29	3.21	27.19	97.2	1.189
					1000	(4.20)	(34.40)			(27.31)	(86.7)	(1.373)
90.45	CREST; August 18, 1950; 2249 GCT; 32°54.5'N, 118°56.5'W; sounding, 930 fm; wind, 320°, force 4; weather, overcast; sea, rough; wire angle, 15°.											
0	18.16	33.69	5.34	0.48	0	18.16	33.69	5.34	0.48	24.25	368.3	0.000
9	18.13	33.73	5.44	0.48	10	18.11	33.73	5.51	0.48	24.29	364.3	0.037
24	13.75	33.60	5.91	0.66	20	14.80	33.60	5.90	0.52	24.96	301.3	0.070
53	10.06	33.68	3.59	1.76	30	12.75	33.61	5.87	1.23	25.39	260.7	0.098
77	9.35	33.77	2.89	1.88	50	10.30	33.65	4.05	1.72	25.87	215.2	0.146
105	8.98	33.91	2.52	1.98	75	9.40	33.76	2.91	1.88	26.10	193.1	0.197
158	8.41	34.05	1.87	-	100	9.03	33.90	2.60	1.96	26.27	177.5	0.243
210	8.12	34.11	1.57	2.60	150	8.48	34.03	1.95	2.21	26.46	160.5	0.327
313	7.43	34.22	0.86	3.08	200	8.15	34.10	1.63	2.53	26.57	151.4	0.406
420	6.72	34.27	0.51	3.48	250	7.86	34.15	1.27	2.79	26.65	144.3	0.479
523	6.10	34.31	0.36	3.61	300	7.52	34.21	0.93	3.04	26.74	135.8	0.550
626	5.53	34.36	0.31	3.77a)	400	6.85	34.27	0.56	3.43	26.89	123.5	0.679
829	4.77	34.42	0.35	-	500	6.23	34.30	0.37	3.59	26.99	114.4	0.797
1035	4.13	34.47	0.39	3.58	600	5.68	34.35	0.31	3.73	27.10	104.7	0.908
1235	3.88	34.45	0.55	3.55	700	5.23	34.39	0.31	(3.76)	27.19	97.2	1.009
					800	4.87	34.41	0.35	(3.70)	27.24	92.3	1.104
					1000	4.23	34.46	0.40	(3.60)	27.35	82.6	1.278
90.53	CREST; August 18, 1950; 1806 GCT; 32°39.5'N, 119°29.5'W; sounding, 740 fm; wind, 320°, force 3; weather, overcast; sea, rough; wire angle, 11°.											
0	17.25	33.53	4.47	0.47	0	17.25	33.53	4.47	0.47	24.35	358.7	0.000
10	17.24	33.57	4.57	0.43	10	17.24	33.57	4.57	0.42	24.38	356.1	0.036
24	17.23	33.55	4.78	0.30	20	17.23	33.56	4.77	0.31	24.38	356.7	0.071
49	12.76	33.39	4.35	0.66	30	17.20	33.48	4.75	0.34	24.32	362.2	0.107
73	10.72	33.48	4.36	1.28	50	12.70	33.39	4.35	0.68	25.23	276.4	0.171
97	9.94	33.55	3.26	1.64	75	10.65	33.49	4.34	1.33	25.68	233.3	0.235
150	8.84	33.95	3.07	1.95	100	9.88	33.57	3.21	1.67	25.88	215.3	0.291
198	8.32	34.02	1.92	2.00	150	8.84	33.95	3.07	1.95	26.34	171.9	0.388
293	7.59	34.22	0.82	2.24	200	8.28	34.03	1.87	2.00	26.49	158.5	0.470
392	6.83	34.22	0.47	2.76	250	7.90	34.14	1.20	2.09	26.63	145.6	0.547
487	6.26	34.27	0.34	3.01	300	7.53	34.22	0.79	2.26	26.75	135.2	0.616
586	5.85	34.36	0.26	3.10	400	6.76	34.22	0.45	2.79	26.86	126.0	0.747
682	5.34	34.36r	0.37r	3.05r	500	6.23	34.28	0.32	3.03	26.98	115.8	0.868
782	4.89	34.40	0.30	3.12	600	5.78	34.37	0.26	3.10	27.10	104.6	0.978
977	4.22	34.40	0.39	3.08	700	5.25	34.40	0.27	3.12	27.19	96.7	1.079
					800	4.81	34.40	0.31	3.12	27.24	92.3	1.173
					1000	(4.15)	(34.40)	(0.41)	(3.07)	(27.32)	(86.1)	(1.352)

a) Mean value of 3.65 and 3.88 μg at/L.

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

CREST; August 18, 1950; 1254 GCT; 32°25'N, 119°59.5'W; sounding, 500 fm; wind, 320°, force 3; weather, overcast; sea, very rough; wire angle, 20°. 90.60

0	16.70	-	5.49	0.46	0	16.70		5.49	0.46
10	16.70	-	5.51	0.45	10	16.70		5.51	0.45
24	16.62	-	5.44	0.52	20	16.65		5.45	0.51
47	14.98	-	5.79	0.52	30	15.65		5.50	0.52
71	12.44	-	5.73	0.68	50	14.30		5.79	0.52
94	10.49	-	5.27	1.11	75	11.80		5.67	0.75
144	8.82	-	3.80	1.76	100	10.20		5.13	1.21
188	8.16	-	2.79	1.96	150	8.70		3.66	1.79
232	7.85	-	2.04	2.35	200	8.04		2.58	2.04
274	7.66	-	1.38	2.74a)	250	7.76		1.74	2.53
365	7.10	34.23	0.75	3.14	300	7.52		1.14	2.86
454	6.48	34.27	0.52	3.44	400	6.85	34.25	0.63	3.28
550	5.96	34.31	0.39	3.51	500	6.20	34.29	0.45	3.48
644	5.25	34.31	0.32	3.59	600	5.62	34.31	0.35	3.55
747	4.85	34.33	0.37	3.60	700	4.98	34.32	0.35	3.60

CREST; August 18, 1950; 0730 GCT; 32°05'N, 120°40'W; sounding, 2,080 fm; wind, 320°, force 5; weather, overcast; sea, very rough; wire angle, 16°. 90.70

0	16.49	33.26	4.72	0.38	0	16.49	33.26	4.72	0.38	24.32	361.7	0.000
9	16.50	33.28	4.70	0.33	10	16.50	33.28	4.68	0.34	24.33	360.6	0.036
24	15.59	33.42	4.37	0.41	20	15.75	33.42	4.39	0.39	24.61	334.4	0.071
52	11.44	33.01	4.77	0.67	30	15.25	33.40	4.39	0.47	24.71	325.6	0.104
76	10.72	33.33	4.29	1.17	50	11.70	33.02	4.77	0.67	25.13	285.5	0.165
105	9.61	-	4.01	1.56	75	10.75	33.33	4.34	1.16	25.54	246.8	0.232
157	8.64	-	2.54	1.93	100	9.88		4.04	1.52			
208	7.90	-	1.86	2.10	150	8.75		2.66	1.89			
310	6.96	-	0.88	2.33	200	8.00		1.92	2.08			
418	6.38	-	0.40	2.86	250	7.43		1.44	2.20			
522	5.94	-	0.32	2.97	300	7.03		0.96	2.31			
627	5.54	-	0.29	3.11	400	6.45		0.43	2.77			
833	4.68	-	0.35	3.04	500	6.05		0.34	2.96			
1043	3.98	-	0.52	3.04	600	5.63		0.30	3.08			
1245	3.48	-	0.68	3.02	700	5.27		0.30	3.09			
					800	4.83		0.35	3.05			
					1000	4.10		0.50	3.04			

CREST; August 18, 1950; 0200 GCT; 31°45'N, 121°19'W; sounding, 2,100 fm; wind, 320°, force 4; weather, overcast; sea, very rough; wire angle, 20°. 90.80

0	17.85	33.48	5.42	0.50	0	17.85	33.48	5.42	0.50	24.17	376.1	0.000
9	17.86	33.48	5.39	0.49	10	17.86	33.48	5.39	0.49	24.16	376.6	0.038
23	16.44	33.35	5.59	0.47	20	17.12	33.35	5.53	0.47	24.24	369.5	0.075
47	14.13	33.35	6.01	0.59	30	16.33	33.35	5.75	0.48	24.43	352.3	0.111
70	11.86	33.37	5.36	1.13	50	13.40	33.35	5.99	0.63	25.06	292.6	0.176
102	10.74	33.44	4.71	1.49	75	11.65	33.38	5.25	1.20	25.42	258.6	0.244
153	9.04	33.71	3.77	1.92	100	10.80	33.43	4.75	1.47	25.61	240.8	0.307
203	8.42	33.93	3.13	2.05	150	9.14	33.69	3.81	1.91	26.09	195.7	0.416
300	6.78	33.96	2.66	2.48	200	8.45	33.93	3.15	2.05	26.39	168.4	0.507
399	5.64	33.96	1.72	2.98	250	7.75	33.96	2.87	2.23	26.52	156.8	0.588
494	5.32	34.11	0.76	3.27	300	6.78	33.96	2.66	2.48	26.65	144.4	0.664
592	4.76	34.23	0.48	3.56	400	5.63	33.96	1.70	2.98	26.80	130.6	0.801
787	4.20	34.34	0.41	-	500	5.30	34.12	0.72	3.29	26.96	115.8	0.925
989	3.70	34.43	0.61	3.44	600	4.72	34.23	0.47	(3.56)	27.12	101.7	1.033
1188	3.26	-	-	-	700	4.40	34.30	0.42	(3.54)	27.21	93.7	1.131
					800	4.17	34.35	0.41	(3.51)	27.27	88.2	1.222
					1000	3.68	(34.44)	(0.62)	(3.44)	(27.40)	(77.5)	(1.387)

a) Mean value of 2.65 and 2.82 μg at/L.

SIO

CCOFI 5008

OBSERVED					INTERPOLATED					COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m

90.90 CREST; August 17, 1950; 2053 GCT; 31°35.5'N, 121°56.5'W; sounding, 2,150 fm; wind, 320°, force 4; weather, overcast; sea, rough; wire angle, 25°.

0	17.56	33.06	5.17	0.51	0	17.56	33.06	5.17	0.51	23.92	400.0	0.000
9	17.49	33.10	4.94	0.54	10	17.45	33.10	4.93	0.54	23.97	394.9	0.040
22	17.21	33.08	4.87	0.47	20	17.25	33.08	4.87	0.48	24.00	392.1	0.079
45	17.37	33.39	4.95	0.40	30	17.25	33.13	4.87	0.44	24.04	388.8	0.118
67	15.18	33.21	5.03	0.43	50	17.25	33.38	4.97	0.40	24.23	371.2	0.194
89	-	33.28	5.37	0.49	75	15.00	33.24	5.12	0.45	24.64	333.3	0.282
135	11.26	33.12	5.19	0.73	100	13.62	33.26	5.37	0.51	24.94	304.7	0.362
176	9.78	33.39	4.26	1.26	150	10.65	33.20	4.87	0.91	25.46	256.3	0.502
255	8.27	33.87	3.18	1.88	200	9.23	33.57	3.88	1.51	25.98	206.9	0.618
336	6.98	33.98	2.26	2.15	250	8.35	33.85	3.24	1.85	26.33	174.5	0.714
413	5.93	33.98	1.36	2.83	300	7.54	33.97	2.70	2.05	26.55	153.9	0.795
495	5.36	34.07	0.86	3.01	400	6.07	33.98	1.47	2.74	26.76	134.7	0.940
665	4.58	34.26	0.36	3.20	500	5.33	34.08	0.83	3.02	26.93	119.1	1.067
843	4.08	34.36	0.41	3.24	600	4.86	34.20	0.45	3.16	27.08	105.6	1.179
1040	3.61	34.40	0.55	3.31	700	4.45	34.28	0.36	3.22	27.19	95.8	1.280
					800	4.17	34.34	0.39	3.23	27.27	88.9	1.372
					1000	3.73	34.40	0.53	3.29	27.36	81.0	1.542

90.100 CREST; August 17, 1950; 1519 GCT; 31°14'N, 122°38'W; sounding, 2,200 fm; wind, 320°, force 3; weather, overcast; sea, rough; wire angle, 8°.

0	18.53	33.44	5.48	0.43	0	18.53	33.44	5.48	0.43	23.97	394.9	0.000
10	18.21	33.44	5.37	0.44	10	18.21	33.44	5.37	0.44	24.05	387.7	0.039
24	18.02	33.49	5.29	0.45	20	18.08	33.46	5.30	0.45	24.09	383.5	0.078
49	17.31	33.58	5.40	0.50	30	17.87	33.52	5.30	0.47	24.19	374.6	0.116
74	16.76	33.68	5.52	0.53	50	17.30	33.59	5.40	0.51	24.38	357.0	0.189
98	16.03	33.64	5.56	0.51	75	16.75	33.68	5.53	0.53	24.58	338.9	0.276
152	13.20	33.70	5.15	0.67	100	15.99	33.64	5.55	0.52	24.72	326.0	0.359
200	10.18	33.60	4.47	1.40	150	13.35	33.71	5.18	0.66	25.34	268.1	0.507
295	7.85	34.00	2.68	2.24	200	10.18	33.60	4.47	1.40	25.85	220.1	0.629
395	6.74	34.00	1.71	2.76	250	8.60	33.90	3.37	1.95	26.34	173.7	0.727
490	5.64	34.11	0.94	3.17	300	7.77	34.00	2.64	2.27	26.54	154.9	0.810
590	5.13	34.18	0.45	3.44	400	6.69	34.00	1.67	2.78	26.69	141.4	0.958
786	4.45	34.27	0.37	-	500	5.58	34.12	0.88	3.20	26.93	119.3	1.087
979	3.96	34.40	0.54	3.78a)	600	5.08	34.19	0.44	(3.46)	27.05	109.0	1.203
1181	-	34.37	0.72	-	700	4.70	34.24	0.40	(3.60)	27.13	101.7	1.307
					800	4.40	34.28	0.39	(3.70)	27.19	96.1	1.406
					1000	(3.90)	34.40	(0.57)	(3.79)	(27.34)	(83.0)	(1.585)

90.110 CREST; August 17, 1950; 1014 GCT; 30°53'N, 123°18'W; sounding, 2,150 fm; wind, 360°, force 3; weather, fog; sea, rough; wire angle, 4°.

0	18.19	33.40	4.38	0.45	0	18.19	33.40	4.38	0.45	24.02	389.8	0.000
10	17.94	33.42	4.60	0.47	10	17.94	33.42	4.60	0.47	24.10	383.1	0.039
25	17.81	33.37	4.77	0.45	20	17.87	33.37	4.72	0.46	24.08	385.2	0.077
50	17.15	33.58	4.95	0.41	30	17.72	33.37	4.82	0.44	24.11	382.0	0.115
75	16.47	33.64	4.58	0.41	50	17.15	33.58	4.95	0.41	24.41	354.4	0.189
100	15.95	33.71	4.75	0.45	75	16.47	33.64	4.58	0.41	24.62	335.6	0.275
155	13.08	33.60	4.44	0.62	100	15.95	33.71	4.75	0.45	24.79	319.8	0.357
204	10.32	33.62	3.82	1.24	150	13.40	33.60	4.49	0.60	25.25	276.8	0.506
300	8.03	33.98	2.41	1.98	200	10.50	33.61	3.92	1.20	25.80	224.6	0.632
401	6.80	34.04	1.40	2.38	250	9.07	33.77	3.07	1.70	26.17	190.6	0.735
496	5.72	34.14	0.78	2.90	300	8.03	33.98	2.41	1.98	26.49	160.5	0.823
598	5.36	34.23	0.44	3.15	400	6.82	34.04	1.41	2.37	26.71	140.2	0.973
798	4.54	34.38	0.33	3.18	500	5.70	34.14	0.75	2.91	26.93	119.3	1.103
995	3.94	34.42	0.52	3.16	600	5.35	34.23	0.43	3.15	27.05	109.4	1.217
1198	3.34	34.45	0.77	3.15	700	4.97	34.31	0.33	3.18	27.15	99.9	1.322
					800	4.53	34.38	0.33	3.18	27.26	90.5	1.417
					1000	3.92	34.42	0.54	3.16	27.36	81.8	1.589

a) Mean value of 3.68 and 3.89 μg at/L.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

CREST; August 17, 1950; 0321 GCT; 30°31'N, 123°58.5'W; sounding, 2,250 fm; wind, 340°, force 1; weather, fog; sea, rough; wire angle, 7°. 90.120

0	18.71	33.37	5.31	0.55	0	18.71	33.37	5.31	0.55	23.87	404.5	0.000
10	18.33	33.31	5.33	0.52	10	18.33	33.31	5.33	0.52	23.91	400.5	0.040
25	17.83	33.30	5.37	0.51	20	18.25	33.30	5.35	0.51	23.93	399.1	0.080
50	15.55	33.21	5.82	0.46	30	16.95	33.30	5.41	0.50	24.24	369.7	0.119
75	14.34	33.26	5.83	0.52	50	15.55	33.21	5.82	0.46	24.49	346.3	0.190
99	13.44	33.30	5.67	0.57	75	14.34	33.26	5.83	0.52	24.80	318.2	0.273
153	10.77	33.49	4.61	1.14	100	13.37	33.30	5.65	0.57	25.02	297.0	0.350
201	9.04	33.71	3.90	1.78	150	11.00	33.48	4.67	1.11	25.61	241.6	0.485
295	7.78	33.96	2.78	2.33	200	9.05	33.70	3.92	1.78	26.11	194.5	0.594
395	6.77	34.11	1.22	2.84	250	8.30	33.86	3.31	2.13	26.36	172.2	0.686
490	6.40	34.25	0.45	3.26	300	7.72	33.97	2.71	2.35	26.53	156.4	0.767
592	5.45	34.25	0.37	3.31	400	6.74	34.12	1.15	2.86	26.78	133.2	0.912
792	4.58	34.40	0.48	3.32	500	6.35	34.25	0.44	3.27	26.94	119.7	1.039
989	3.87	34.40	0.54	3.42r	600	5.39	34.25	0.38	3.30	27.06	108.4	1.153
1192	3.38	34.47	0.88	3.54r	700	4.92	34.32	0.45	3.32	27.17	98.5	1.256
					800	4.55	34.40	0.49	(3.32)	27.27	89.1	1.350
					1000	3.85	34.40	0.55		27.35	82.5	1.522

BLACK DOUGLAS; September 19, 1950; 2158 GCT; 43°54.5'N, 124°49.5'W; sounding, 120 fm; wind, calm; weather, haze; sea, slight; wire angle, 4°. 30.26

0	13.27	31.98E	5.88		0	13.27	31.98	5.88		24.03	389.5	0.000
10	11.40	33.12	5.32		10	11.40	32.12	5.32		24.49	345.8	0.037
25	8.39	32.55	4.96		20	9.10	32.38	5.07		25.08	289.8	0.068
50	7.50	32.92	4.65		30	8.00	32.67	4.88		25.47	252.6	0.096
75	7.80	33.40	3.60		50	7.50	32.92	4.65		25.74	227.5	0.144
100	7.37	33.70	2.38		75	7.80	33.40	3.60		26.07	196.2	0.197
155	7.33	33.82	1.95		100	7.37	33.70	2.38		26.36	168.7	0.242
200	7.23	33.93	1.20		150	7.34	33.81	1.98		26.45	160.7	0.324
					200	7.22	33.93	1.15		26.57	150.9	0.403

BLACK DOUGLAS; September 19, 1950; 1843 GCT; 43°46.5'N, 125°08.5'W; sounding, 815 fm; wind, 150°, force 2; weather, overcast; sea, slight; wire angle, 1°. 30.30

0	16.85	31.87E	5.90		0	16.85	31.87	5.90		23.17	470.9	0.000
10	16.75	31.85	5.70		10	16.75	31.85	5.70		23.18	470.4	0.047
25	14.59	32.43	6.06		20	16.32	31.85	5.94		23.28	461.3	0.094
51	8.81	32.57	6.40		30	12.25	32.51	6.10		24.63	332.4	0.133
76	7.51	32.56	6.48		50	8.89	32.57	6.39		25.26	273.1	0.194
100	7.00	32.79	5.74		75	7.55	32.56	6.47		25.45	255.3	0.260
153	7.29	33.57	3.75		100	7.00	32.79	5.74		25.70	231.3	0.326
202	6.70	33.82	3.94r		150	7.29	33.55	3.77		26.26	179.4	0.424
299	6.04	33.93	2.06		200	6.76	33.81	3.23		26.54	153.6	0.507
400	5.40	34.01	1.31		250	6.33	33.89	2.64		26.66	142.7	0.580
497	4.97	34.07	0.73		300	6.03	33.93	2.05		26.72	136.7	0.651
598	4.52	34.13	0.61		400	5.40	34.01	1.31		26.87	124.1	0.781
796	4.22	34.31	0.42		500	4.96	34.07	0.71		26.96	115.5	0.901
990	3.69	34.40	0.42		600	4.51	34.13	0.61		27.06	106.8	1.012
1194	3.13	34.46	0.87		700	4.34	34.21	0.52		27.14	99.7	1.115
					800	4.20	34.31	0.42		27.24	91.8	1.211
					1000	3.67	34.40	0.43		27.36	80.4	1.383

E Evaporation of salinity samples occurred on all Black Douglas stations of Cruise 5009. Individual salinity values must be considered doubtful (see introduction). They appear to be 0.04‰ higher on an average.

SIO

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5009

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

30.40 BLACK DOUGLAS; September 19, 1950; 1023 GCT; 43°26.5'N, 125°56'W; sounding, 1,720 fm; wind, calm; weather, clear; sea, slight; wire angle, 3°.

0	16.39	31.82E	5.69	0	16.39	31.82	5.69	23.25	464.4	0.000
10	15.12	31.88	5.92	10	15.12	31.88	5.92	23.57	433.6	0.045
25	10.99	32.53	5.76	20	11.65	32.20	5.85	24.50	344.4	0.084
51	8.16	32.78	4.75	30	10.40	32.60	5.64	25.03	294.0	0.116
76	7.45	33.12	4.55	50	8.23	32.77	4.81	25.51	248.7	0.170
100	7.28	33.58	3.90	75	7.46	33.12	4.56	25.90	212.4	0.228
139p	7.31	33.66	3.39	100	7.28	33.58	3.90	26.28	176.2	0.276
237p	6.39	33.93	2.60	150	7.28	33.68	3.29	26.36	169.4	0.363
341p	5.74	33.98	1.42	200	6.92	33.81	2.89	26.51	155.7	0.443
442p	5.02	34.05	0.97	250	6.27	33.95	2.48	26.71	137.5	0.517
550p	4.90	34.19	0.66	300	5.95	33.97	1.92	26.77	132.6	0.584
767p	4.36	34.28	0.40	400	5.33	34.01	1.09	26.87	123.2	0.712
979p	3.64	34.43	0.45	500	4.92	34.12	0.80	27.01	111.2	0.829
1190p	3.20	34.43	0.59	600	4.83	34.23	0.56	27.11	103.0	0.936
				700	4.58	34.27	0.44	27.17	98.1	1.037
				800	4.24	34.30	0.40	27.23	92.7	1.132
				1000	3.58	34.43	0.47	27.40	77.1	1.302

30.50 BLACK DOUGLAS; September 19, 1950; 0359 GCT; 43°06.5'N, 126°43.5'W; sounding, 1,840 fm; wind, calm; weather, partly cloudy; sea, moderate; wire angle, 4°.

0	17.44	31.80E	5.47	0	17.44	31.80	5.47	22.98	489.2	0.000
10	17.19	31.80	5.62	10	17.19	31.80	5.62	23.04	483.8	0.049
25	16.19	32.24	4.93	20	17.17	31.82	5.07	23.06	482.2	0.097
51	11.93	32.48	5.37	30	15.15	32.31	4.96	23.89	403.2	0.141
75	8.84	32.57	5.77	50	12.10	32.47	5.32	24.63	333.1	0.215
100	8.10	32.75	5.17	75	8.84	32.57	5.77	25.26	272.8	0.291
154	8.38	33.57	4.08	100	8.10	32.75	5.17	25.51	249.3	0.356
203	7.84	33.85	2.68	150	8.38	33.54	4.15	26.02	202.8	0.468
298	6.95	33.92	2.40	200	7.88	33.84	2.71	26.40	166.7	0.561
398	6.08	33.98	1.63	250	7.36	33.90	2.47	26.52	155.7	0.642
495	5.75	34.06	1.20	300	6.92	33.92	2.38	26.60	149.0	0.717
585	5.07	34.14	0.78	400	6.07	33.98	1.61	26.76	134.7	0.859
793	4.36	34.25	0.46	500	5.74	34.06	1.17	26.86	125.8	0.990
991	3.71	34.36	0.36	600	4.99	34.15	0.74	27.02	110.9	1.108
1194	3.28	34.42	0.46	700	4.55	34.21	0.53	27.12	102.1	1.215
				800	4.35	34.25	0.45	27.18	97.7	1.315
				1000	3.68	34.36	0.36	27.33	83.4	1.496

30.60 BLACK DOUGLAS; September 18, 1950; 2145 GCT; 42°46.5'N, 127°30.5'W; sounding, 1,580 fm; wind, 340°, force 1; weather, partly cloudy; sea, moderate; wire angle, 6°.

0	14.39	32.65E	6.13	0	14.39	32.65	6.13	24.31	362.1	0.000
12	13.33	32.60	6.30	10	13.75	32.60	6.27	24.41	353.4	0.036
27	11.00	32.66	6.41	20	11.90	32.62	6.36	24.78	317.8	0.069
52	8.47	32.77	5.54	30	10.50	32.67	6.41	25.07	290.5	0.100
76	8.10	32.90	5.28	50	8.56	32.76	5.56	25.46	254.2	0.154
100	8.24	33.33	4.59	75	8.12	32.89	5.29	25.62	238.6	0.216
154	7.96	33.73	3.70	100	8.24	33.33	4.59	25.95	207.9	0.272
202	7.28	33.94	2.45	150	8.00	33.71	3.75	26.28	177.2	0.368
297	6.34	34.01	1.50	200	7.33	33.93	2.52	26.55	152.3	0.450
396	5.70	34.06	1.02	250	6.74	33.99	1.86	26.68	140.6	0.524
490	5.05	34.18	0.60	300	6.32	34.01	1.47	26.75	134.3	0.592
588	4.79	34.22	0.46	400	5.67	34.06	1.01	26.87	123.7	0.721
786	4.32	34.31	0.33	500	5.00	34.19	0.57	27.06	107.0	0.836
981	3.84	34.42	0.39	600	4.77	34.22	0.45	27.11	103.0	0.941
1183	3.26	34.45	0.50	700	4.55	34.26	0.37	27.16	98.4	1.042
				800	4.29	34.32	0.32	27.24	91.8	1.137
				1000	3.79	34.43	0.41	27.38	79.5	1.308

E Evaporation (see page 281).

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

30.70

BLACK DOUGLAS; September 18, 1950; 1440 GCT; 42°26.5'N, 128°17'W; sounding, 1,720 fm; wind, 340°, force 1; weather, overcast; sea, moderate; wire angle, 11°.

0	17.63	32.23E	5.57	0	17.63	32.23	5.57	23.26	462.3	0.000
12	17.65	32.25	4.79r	10	17.65	32.24	5.65	23.27	462.1	0.046
27	17.87	32.34	5.84	20	17.80	32.28	5.71	23.26	462.9	0.092
51	11.94	32.65	6.95	30	17.87	32.35	5.90	23.30	459.8	0.139
76	9.44	32.73	5.66	50	11.99	32.64	6.93	24.78	318.6	0.216
99	8.48	32.65	5.80	75	9.50	32.73	5.66	25.28	270.9	0.290
149	7.45	33.04	5.76	100	8.44	32.65	5.80	25.39	261.4	0.357
195	7.22	33.74	4.18a)	150	7.44	33.04	5.76	25.84	219.2	0.476
286	6.37	33.93	2.73	200	7.19	33.76	4.02	26.44	163.0	0.573
382	5.51	33.97	1.75	250	6.76	33.88	3.19	26.59	149.1	0.650
473	5.04	34.07	1.01	300	6.24	33.94	2.58	26.71	138.5	0.722
560	4.63	34.15	0.81	400	5.40	33.98	1.59	26.84	126.3	0.854
760	4.04	34.29	0.47	500	4.92	34.10	0.91	26.99	112.7	0.974
953	3.54	34.36	0.35	600	4.47	34.18	0.74	27.11	102.5	1.081
1153	3.20	34.47	0.56	700	4.17	34.25	0.57	27.19	94.7	1.180
				800	3.94	34.31	0.42	27.27	88.5	1.271
				1000	3.44	34.38	0.38	27.37	79.1	1.439

30.80

BLACK DOUGLAS; September 18, 1950; 0630 GCT; 42°06.5'N, 129°04'W; sounding, 1,780 fm; wind, 340°, force 4; weather, partly cloudy; sea, very rough; wire angle, 20°.

0	18.38	32.56E	4.97	0	18.38	32.56	4.97	23.34	455.4	0.000
9	18.37	32.56	4.80	10	18.37	32.56	4.80	23.34	455.5	0.046
23	18.31	32.63	4.85	20	18.32	32.59	4.84	23.37	452.4	0.091
51	11.73	32.73	4.82	30	18.29	32.66	4.85	23.43	446.9	0.136
76	9.90	32.77	5.30	50	11.74	32.72	4.82	24.89	308.3	0.211
104	9.22	32.77	5.18	75	9.94	32.77	5.30	25.24	274.9	0.284
155	7.88	32.86	4.76	100	9.31	32.77	5.19	25.35	265.5	0.352
204	7.38	33.62	4.38	150	7.98	32.81	4.81	25.58	243.8	0.479
304	6.28	33.96	2.78	200	7.42	33.56	4.40	26.25	181.0	0.586
408	5.47	34.00	1.67	250	6.93	33.85	3.73	26.54	153.6	0.669
508	4.99	34.11	0.94	300	6.34	33.95	2.85	26.70	139.1	0.742
608	4.58	34.11	0.59	400	5.52	34.00	1.72	26.84	126.3	0.875
806	3.96	34.27	0.36	500	5.01	34.11	1.00	26.99	113.0	0.994
1008	3.49	34.35	0.38	600	4.62	34.11	0.61	27.03	109.4	1.105
1207	3.07	34.47	0.50	700	4.25	34.18	0.44	27.13	100.8	1.211
				800	3.98	34.26	0.36	27.22	92.7	1.307
				1000	3.51	34.35	0.37	27.34	82.2	1.482

30.90

BLACK DOUGLAS; September 17, 1950; 2230, 2245 GCT; 41°47'N, 129°50'W; sounding, 1,750 fm; wind, 360°, force 4; weather, overcast; sea, very rough; wire angle, 13°, 14°.

0	18.63	32.66E	5.50	0	18.63	32.66	5.50	23.35	454.0	0.000
10	18.63	32.66	5.38	10	18.63	32.66	5.38	23.35	454.3	0.045
24	18.64	32.66	5.48	20	18.64	32.66	5.42	23.35	454.9	0.091
				30	18.63	32.65	5.75	23.34	455.7	0.136
49	14.82	32.61	6.87	50	14.80	32.61	6.87	24.19	375.0	0.219
74	10.35	32.60	6.19	75	10.30	32.60	6.18	25.05	293.3	0.303
98	8.80	32.66	6.10	100	8.76	32.67	6.10	25.35	264.6	0.373
149	7.58	33.31	4.57	150	7.57	33.33	4.55	26.05	199.4	0.488
197	7.09	33.75	3.85	200	7.07	33.76	3.82	26.45	161.4	0.579
291	5.98	33.95	2.73	250	6.49	33.89	3.25	26.63	144.8	0.655
390	5.10	33.99	1.66	300	5.89	33.95	2.61	26.76	133.3	0.724
484	4.66	34.07	1.12	400	5.05	34.00	1.58	26.90	120.6	0.851
583	4.59	34.17	0.55	500	4.63	34.09	1.04	27.02	110.0	0.967
777	4.14	34.28	0.37	600	4.57	34.18	0.50	27.09	103.9	1.074
969	3.53	34.40	0.27	700	4.40	34.24	0.38	27.16	98.1	1.175
1173	3.08	34.43	0.60	800	4.07	34.29	0.35	27.24	91.5	1.269
				1000	3.45	34.41	0.29	27.39	77.0	1.438

a) Alternate value, 3.57 ml/L, not used in interpolation.

E Evaporation (see page 281).

SIO

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5009

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

30.100 BLACK DOUGLAS; September 17, 1950; 1359 GCT; 41°27'N, 130°36'W; sounding, 1,780 fm; wind, 350°, force 4; weather, overcast; sea, rough; wire angle, 16°.

0	18.75	5.28	0	18.75	5.28	
10	18.75	5.24	10	18.75	5.24	
25	18.76	5.31	20	18.75	5.27	
49	12.54	6.52	30	18.76	5.53	
71	10.30	5.66	50	11.99	6.52	
94	9.56	5.88	75	10.13	5.66	
143	8.44	5.70	100	9.40	5.88	
185	7.56	4.82	150	8.29	5.60	
267	6.60	3.33	200	7.35	4.51	
348	5.79	2.37	250	6.77	3.60	
437	5.37	1.34	300	6.27	2.90	
526	4.52	1.06	400	5.50	1.75	
701	4.12	0.55	500	4.83	1.10	
879	3.80	0.32	600	4.24	0.87	
1074	3.38	0.48	700	4.12	0.56	
			800	3.97	0.37	
			1000	3.54	0.38	

33.32 BLACK DOUGLAS; September 20, 1950; 0435 GCT; 43°07.5'N, 124°53'W; sounding, 230 fm; wind, calm; weather, clear; sea, smooth; wire angle, 6°.

0	10.80	33.12E	4.84	0	10.80	32.39	4.84	24.80	315.5	0.000
10	-	32.97	6.05	10	9.30	33.02	6.05	25.54	245.2	0.028
25	8.07	33.24	4.36	20	8.30	33.19	5.75	25.83	218.0	0.051
50	7.68	33.49	4.05	30	7.96	33.30	4.28	25.97	205.2	0.072
75	7.50	33.55	3.50	50	7.68	33.49	4.05	26.16	187.5	0.112
100	7.70	33.73	3.02	75	7.50	33.55	3.50	26.23	180.9	0.158
153	6.80	33.86	3.40r	100	7.70	33.73	3.02	26.34	170.7	0.202
202	6.74	34.02	2.07	150	6.84	33.85	2.52	26.56	150.9	0.282
250	6.49	34.02	1.80	200	6.74	34.02	2.10	26.70	137.7	0.354
299	6.45	34.07	1.28	250	6.49	34.02	1.80	26.74	135.2	0.422
352	6.34	34.07	1.50r	300	6.47	34.07	(1.27)	26.78	131.8	0.489

37.38 BLACK DOUGLAS; September 20, 1950; 1203 GCT; 42°20'N, 124°56.5'W; sounding, 660 fm; wind, 020°, force 4; weather, clear; sea, moderate; wire angle, 13°.

0	15.15	32.79E	5.42	0	15.15	32.79	5.42	24.26	367.3	0.000
10	15.12	32.79	5.24	10	15.12	32.79	5.24	24.27	366.9	0.037
24	11.16	32.99	5.75	20	14.60	32.82	5.70	24.40	354.4	0.073
48	8.86	33.39	4.44	30	10.45	33.07	5.74	25.39	260.1	0.103
74	8.13	33.51	4.24	50	8.75	33.40	4.41	25.93	209.5	0.150
99	8.02	33.77	3.39	75	8.12	33.52	4.22	26.11	192.1	0.201
154	7.45	33.93	2.20	100	8.01	33.78	3.36	26.33	171.5	0.246
202	7.12	33.98	1.77	150	7.52	33.92	2.25	26.52	154.9	0.327
296	6.44	34.07	1.35	200	7.14	33.98	1.80	26.62	146.0	0.403
396	-	34.11	0.95	250	6.78	34.02	1.52	26.70	138.9	0.474
491	5.35	34.14	0.81	300	6.41	34.07	1.33	26.79	131.1	0.542
591	4.95	34.20	0.52	400	5.80	34.11	0.92	26.90	121.6	0.667
686	4.66	34.33	0.32	500	5.31	34.14	0.79	26.98	114.4	0.786
788	4.32	34.34	0.27	600	4.92	34.21	0.50	27.08	105.6	0.896
986	3.72	34.49	0.33	700	4.62	34.34	0.30	27.22	93.3	0.996
				800	4.28	34.34	0.28	27.25	90.2	1.087
				1000	(3.67)	(34.50)	(0.34)	(27.44)	(72.9)	(1.250)

E Evaporation (see page 281).

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

BLACK DOUGLAS; September 14, 1950; 0445 GCT; 41°33'N, 125°00'W; sounding, 740 fm; wind, calm; weather, overcast; sea, moderate; wire angle, 14°. 40.45

0	13.99	32.89E	6.39	0	13.99	32.89	6.39	24.58	336.6	0.000
10	13.36	32.94	6.45	10	13.36	32.94	6.45	24.74	321.7	0.033
24	11.15	32.94	6.68	20	12.10	32.94	6.65	24.99	297.8	0.064
48	9.96	33.57	6.12	30	10.76	32.94	6.66	25.24	274.8	0.093
72	8.24	33.58	4.79	50	9.74	33.57	6.00	25.90	212.0	0.141
97	8.28	33.76	4.40	75	8.24	33.58	4.77	26.15	189.1	0.191
149	7.40	33.93	3.54	100	8.27	33.80	4.36	26.31	173.6	0.237
197	6.89	33.95	2.85	150	7.39	33.93	3.52	26.54	152.4	0.318
291	6.08	34.01	1.87	200	6.86	33.95	2.82	26.63	144.5	0.393
391	5.59	34.08	1.10	250	6.42	33.98	2.26	26.71	137.2	0.463
487	5.13	34.18	0.64	300	6.01	34.02	1.79	26.80	129.6	0.530
587	4.86	34.29	0.62	400	5.56	34.09	1.03	26.91	120.1	0.655
784	4.28	34.38	0.38	500	5.08	34.19	0.63	27.05	107.9	0.769
981	3.63	34.45	0.53	600	4.82	34.30	0.61	27.16	97.7	0.871
1183	3.12	34.51	0.68	700	4.56	34.35	0.51	27.23	91.9	0.966
				800	4.23	34.39	0.41	27.30	85.9	1.055
				1000	3.57	34.46	0.56	27.42	74.7	1.215

BLACK DOUGLAS; September 14, 1950; 0853 GCT; 41°23'N, 125°23'W; sounding, 1,690 fm; wind, calm; weather, overcast; sea, moderate; wire angle, 4°. 40.50

0	13.52	32.99E	5.66	0	13.52	32.99	5.66	24.75	320.1	0.000
10	11.72	33.08	6.23	10	11.72	33.08	6.23	25.17	280.5	0.030
25	10.35	33.04	5.76	20	10.46	33.05	6.09	25.37	261.5	0.057
50	10.23	33.30	5.53	30	10.31	33.04	5.70	25.39	260.0	0.083
74	9.96	33.48	5.06	50	10.23	33.30	5.53	25.61	239.7	0.133
99	8.34	33.60	4.07	75	9.89	33.48	5.05	25.81	221.6	0.191
152	7.91	33.93	2.21	100	8.33	33.60	4.05	26.15	189.5	0.242
201	7.32	33.96	2.19	150	7.94	33.92	2.24	26.46	160.8	0.330
296	6.50	34.00	1.77	200	7.33	33.96	2.19	26.58	150.1	0.408
394	5.96	34.09	1.18	250	6.85	33.98	2.05	26.66	142.8	0.481
490	5.30	34.16	0.77	300	6.48	34.00	1.75	26.72	137.2	0.551
594	4.91	34.22	0.47	400	5.92	34.09	1.14	26.87	124.6	0.681
785	4.38	34.34	0.38	500	5.24	34.17	0.74	27.01	111.4	0.799
980	3.79	34.42	0.40	600	4.90	34.22	0.46	27.09	104.6	0.908
1186	3.31	34.49	0.61	700	4.62	34.28	0.38	27.17	97.8	1.009
				800	4.34	34.35	0.39	27.26	90.2	1.103
				1000	3.73	34.43	0.42	27.38	78.8	1.272

BLACK DOUGLAS; September 14, 1950; 1528 GCT; 41°03'N, 126°09'W; sounding, 1,680 fm; wind, calm; weather, partly cloudy; sea, slight; wire angle, 15°. 40.60

0	16.61	32.63E	5.73	0	16.61	32.63	5.73	23.81	410.1	0.000
10	16.16	32.70	6.00	10	16.16	32.70	6.00	23.95	397.0	0.040
24	14.21	32.79	5.90	20	15.25	32.78	5.93	24.23	370.6	0.079
48	9.36	32.83	6.32	30	13.25	32.81	5.94	24.67	328.9	0.114
73	7.88	32.68	6.08	50	9.20	32.83	6.32	25.41	258.5	0.172
97	7.56	33.17	5.60	75	7.86	32.68	6.06	25.49	250.9	0.236
149	7.46	33.75	3.57	100	7.55	33.29	5.54	26.02	201.4	0.293
195	7.14	33.93	2.80	150	7.45	33.76	3.56	26.40	165.8	0.385
287	6.29	34.04	1.90	200	7.11	33.94	2.75	26.59	148.6	0.463
382	5.55	34.00	1.13	250	6.64	34.01	2.24	26.71	137.8	0.535
473	5.26	34.14	1.13	300	6.18	34.04	1.75	26.79	130.3	0.601
569	4.82	34.22	0.71	400	5.46	34.02	1.13	26.87	124.0	0.729
760	4.25	34.13r	0.37	500	5.15	34.16	1.05	27.01	111.0	0.846
951	3.74	34.42	0.42	600	4.66	(34.24)	0.58	(27.13)	(100.2)	(0.952)
1152	3.25	34.45	0.63	700	4.37	(34.31)	0.38	(27.22)	(92.6)	(1.048)
				800	4.16	(34.37)	0.38	(27.29)	(86.6)	(1.146)
				1000	3.62	34.43	0.45	27.39	77.5	(1.302)

E Evaporation (see page 281).

S10

CCOFI 5009

OBSERVED					INTERPOLATED					COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m
40.70	BLACK DOUGLAS; September 14, 1950; 2235 GCT; 40°42'N, 126°55'W; sounding, 1,700 fm; wind, 140°, force 3; weather, overcast; sea, slight; wire angle, 9°.											
0	16.61	32.45E	5.51		0	16.61	32.45	5.51		23.67	423.2	0.000
10	16.37	32.45	6.03		10	16.37	32.45	6.03		23.73	418.3	0.042
25	13.85	32.63	6.19		20	15.25	32.46	6.15		23.98	394.1	0.083
50	10.23	32.66	6.21		30	12.85	32.64	6.20		24.62	333.8	0.119
74	8.42	32.74	6.08		50	10.23	32.66	6.21		25.11	287.4	0.181
97	7.69	32.86	5.14		75	8.35	32.74	6.07		25.47	253.0	0.249
148	7.47	33.68	3.17		100	7.68	32.87	4.85		25.67	234.4	0.310
194	7.32	33.86	2.61		150	7.46	33.70	3.12		26.35	170.4	0.411
285	6.32	34.01	2.14		200	7.30	33.87	2.55		26.51	156.4	0.492
380	5.66	34.09	1.30		250	6.85	33.96	2.27		26.64	144.3	0.567
471	4.73	34.02	0.71		300	6.18	34.02	2.07		26.78	131.8	0.637
566	4.61	34.14	0.47		400	5.45	34.08	1.13		26.92	119.4	0.762
755	4.10	34.33	0.36		500	4.68	34.04	0.60		26.97	114.3	0.879
942	3.64	34.40	0.47		600	4.57	34.18	0.44		27.10	103.6	0.988
1142	3.12	34.45	0.67		700	4.27	34.28	0.37		27.21	93.7	1.087
					800	3.98	34.35	0.36		27.29	86.0	1.176
					1000	3.50	34.41	0.52		27.39	77.6	1.340
40.80	BLACK DOUGLAS; September 15, 1950; 0518 GCT; 40°23'N, 127°40'W; sounding, 910 fm; wind, 150°, force 2; weather, partly cloudy; sea, slight; wire angle, 14°.											
0	18.52	-	5.63		0	18.52	(32.50)	5.63		(23.25)	(463.1)	(0.000)
10	18.52	32.50E	5.57		10	18.52	32.50	5.57		23.26	463.1	0.046
26	18.04	32.50	5.74		20	18.07	32.50	5.66		23.36	453.2	0.092
50	16.58	32.57	6.05		30	18.02	32.50	5.80		23.38	452.3	0.137
74	11.70	32.66	6.22		50	16.58	32.57	6.05		23.77	415.1	0.224
99	9.97	32.68	6.43		75	11.60	32.66	6.24		24.87	310.8	0.315
150	8.06	33.03	5.08		100	9.95	32.68	6.43		25.17	282.8	0.389
195	7.77	33.73	3.54		150	8.06	33.03	5.08		25.74	228.6	0.517
286	6.93	33.98	2.38		200	7.74	33.77	3.44		26.37	169.9	0.616
382	6.07	34.03	1.43		250	7.30	33.94	2.75		26.56	151.9	0.697
476	5.42	34.09	0.92		300	6.78	33.99	2.24		26.67	141.9	0.770
572	4.98	34.16	0.64		400	5.94	34.04	1.31		26.82	128.6	0.905
759	4.30	34.31	0.33		500	5.29	34.11	0.83		26.96	116.4	1.028
947	3.92	34.42	0.36		600	4.86	34.18	0.57		27.06	107.1	1.140
1147	3.23	34.45	0.60		700	4.51	34.26	0.37		27.17	98.0	1.242
					800	4.19	34.34	0.33		27.26	89.2	1.336
					1000	3.77	34.43	0.43		27.38	79.3	1.505
40.90	BLACK DOUGLAS; September 15, 1950; 1220 GCT; 40°02'N, 128°25'W; sounding, 2,500 fm; wind, 170°, force 1; weather, partly cloudy; sea, slight; wire angle, 3°.											
0	18.74	32.39E	5.31		0	18.74	32.39	5.31		23.12	476.3	0.000
10	18.65	33.22r	5.31		10	18.65	32.39	5.31		23.14	474.3	0.048
25	18.16	32.40	5.38		20	18.21	32.40	5.34		23.26	463.7	0.094
50	15.64	32.63	5.64		30	18.16	32.46	5.44		23.31	458.5	0.141
73	11.36	32.69	5.86		50	15.64	32.63	5.64		24.03	390.8	0.225
102	9.90	32.76	5.32		75	11.17	32.70	5.85		24.98	300.4	0.312
153	8.94	33.06	5.38		100	10.00	32.75	5.35		25.22	277.8	0.384
201	8.20	33.65	3.32		150	8.99	33.03	5.37		25.60	242.2	0.514
297	7.10	33.98	1.98		200	8.22	33.64	3.37		26.20	186.5	0.621
398	6.34	34.05	1.34		250	7.56	33.88	2.52		26.48	160.0	0.708
495	5.83	34.11	1.02		300	7.07	33.98	1.96		26.63	146.6	0.784
595	5.39	34.16	0.65		400	6.32	34.05	1.33		26.78	132.7	0.924
794	4.32	34.27	0.39		500	5.78	34.11	1.01		26.90	122.6	1.052
989	3.62	34.41	0.41		600	5.37	34.16	0.64		26.99	114.9	1.171
1193	3.08	34.47	0.68		700	4.87	34.22	0.45		27.09	105.3	1.281
					800	4.30	34.27	0.40		27.20	95.7	1.381
					1000	3.59	34.42	0.42		27.39	77.9	1.555

E Evaporation (see page 281).

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

BLACK DOUGLAS; September 15, 1950; 1913 GCT; 39°42'N, 129°10'W; sounding, 2,500 fm; wind, 190°, force 2; weather, overcast; sea, slight; wire angle, 6°. 40.100

0	18.76	32.66E	5.47	0	18.76	32.66	5.47	23.32	457.1	0.000
10	18.28	32.65	5.86	10	18.28	32.65	5.86	23.43	446.6	0.054
26	17.56	32.79	5.68	20	17.68	32.67	5.73	23.59	431.8	0.089
51	13.53	33.28	6.24	30	17.54	33.08	5.70	23.94	399.0	0.131
75	10.20	33.31	5.16	50	13.75	33.28	6.24	24.93	304.5	0.201
99	9.04	33.53	4.35	75	10.20	33.31	5.16	25.61	240.0	0.269
152	7.57	33.82	3.43	100	9.01	33.56	4.32	26.01	202.4	0.324
201	7.78	33.98	3.82	150	7.61	33.81	3.44	26.42	164.3	0.416
298	6.90	34.09	1.61	200	7.77	33.98	3.81	26.53	154.8	0.496
397	6.06	34.10	1.20	250	7.41	34.05	2.67	26.63	145.3	0.570
494	5.03	34.09	1.15	300	6.86	34.09	1.58	26.74	135.5	0.641
595	4.30	34.13	0.81	400	6.04	34.10	1.19	26.86	125.4	0.771
794	4.00	34.31	0.42	500	5.00	34.09	1.14	26.98	114.4	0.891
988	3.44	34.43	0.52	600	4.28	34.13	0.78	27.09	104.0	1.001
1192	3.08	34.49	0.63	700	4.06	34.22	0.50	27.18	95.7	1.100
				800	3.99	34.31	0.42	27.26	89.1	1.193
				1000	3.40	34.43	0.53	27.41	75.0	1.357

BLACK DOUGLAS; September 16, 1950; 0238 GCT; 39°23'N, 129°55'W; sounding, 2,450 fm; wind, 270°, force 5; weather, cloudy; sea, very rough; wire angle, 0°. 40.110

0	18.96	32.75E	4.96	0	18.96	32.75	4.96	23.34	455.1	0.000
10	18.95	32.59	5.38	10	18.95	32.59	5.38	23.22	467.0	0.046
27	18.64	32.72	5.28	20	18.71	32.66	5.33	23.33	456.5	0.092
51	15.32	32.75	5.81	30	18.64	32.72	5.29	23.39	450.8	0.138
76	10.81	32.74	5.77	50	15.34	32.75	5.80	24.19	375.1	0.221
101	9.13	32.90	5.58	75	10.85	32.74	5.78	25.07	292.0	0.304
154	7.97	33.55	3.94	100	9.15	32.87	5.59	25.45	255.6	0.373
204	7.30	33.87	4.08	150	8.00	33.51	3.97	26.13	192.1	0.484
301	6.59	34.02	1.98	200	7.36	33.86	4.07	26.49	157.9	0.572
403	5.91	34.11	1.17	250	6.90	33.96	3.19	26.64	145.0	0.648
486	5.40	34.16	0.81	300	6.60	34.02	2.00	26.72	137.3	0.718
598	4.82	34.25	0.47	400	5.92	34.11	1.19	26.88	123.1	0.848
798	4.05	34.38	0.27	500	5.32	34.17	0.75	27.00	112.3	0.966
973	3.50	34.47	0.48	600	4.81	34.25	0.46	27.12	101.4	1.072
1202	3.04	34.52	0.74	700	4.41	34.33	0.33	27.23	91.6	1.169
				800	4.04	34.38	0.27	27.31	84.6	1.257
				1000	3.43	34.48	0.52	27.45	71.6	1.414

BLACK DOUGLAS; September 16, 1950; 1114 GCT; 39°03'N, 120°39'W; sounding, 2,420 fm; wind, 270°, force 6; weather, partly cloudy; sea, high; wire angle, 4°. 40.120

0	19.07	32.59E	5.48	0	19.07	32.59	5.48	23.18	469.9	0.000
10	19.08	32.75	5.43	10	19.08	32.75	5.43	23.31	458.5	0.046
25	19.81	–	5.40	20	19.76	32.74	5.40	23.12	476.2	0.093
51	12.85	32.68	6.37	30	19.82	32.72	5.41	23.09	479.4	0.141
76	11.00	32.81	6.44	50	12.87	32.68	6.36	24.65	331.4	0.222
101	10.08	32.77	6.07	75	11.03	32.81	6.43	25.09	289.7	0.300
156	8.75	33.06	5.30	100	10.12	32.77	6.10	25.21	278.3	0.371
206	7.59	33.48	5.10	150	8.89	33.03	5.37	25.62	240.7	0.500
302	6.65	33.87	4.23	200	7.70	33.42	5.14	26.10	195.3	0.609
404	5.46	33.95	2.58	250	7.11	33.73	4.80	26.43	164.9	0.700
500	4.78	34.02	1.51	300	6.68	33.87	4.27	26.59	149.5	0.778
601	4.57	34.16	0.77	400	5.53	33.95	2.66	26.80	130.1	0.918
799	3.99	34.27	0.90r	500	4.78	34.02	1.51	26.95	117.0	1.041
995	3.45	34.45	0.50	600	4.58	34.16	0.78	27.08	105.1	1.152
1200	3.06	34.49	0.66	700	4.34	34.22	0.50	27.15	98.9	1.254
				800	3.99	34.27	0.41	27.23	92.0	1.350
				1000	3.44	34.45	0.50	27.43	74.0	1.516

E Evaporation (see page 281).

SIO

CCOFI 5009

OBSERVED					INTERPOLATED					COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m

43.50 BLACK DOUGLAS; September 13, 1950; 2108 GCT; 40°48'N, 124°57'W; sounding, 1,545 fm; wind, 300°, force 1; weather, overcast; sea, moderate; wire angle, 4°.

0	15.56	32.68E	5.97	0	15.56	32.68	5.97	24.08	383.9	0.000
10	14.42	32.81	5.86	10	14.42	32.81	5.87	24.43	351.2	0.037
25	10.27	32.97	5.73	20	11.75	32.92	5.76	25.04	293.1	0.069
50	8.86	33.31	4.96	30	9.25	33.02	5.65	25.55	244.8	0.096
75	8.93	33.58	4.12	50	8.86	33.31	4.96	25.84	217.8	0.142
99	8.63	33.86	3.10	75	8.93	33.58	4.12	26.04	199.1	0.194
152	7.90	33.86	2.18	100	8.60	33.86	3.05	26.31	174.0	0.241
200	7.41	33.98	2.02	150	7.94	33.86	2.20	26.41	165.3	0.325
297	6.48	34.09	1.23	200	7.41	33.98	2.02	26.58	149.7	0.405
399	5.82	34.14	0.72	250	6.92	34.05	1.67	26.70	138.6	0.476
497	5.29	34.20	0.59	300	6.47	34.09	1.20	26.80	130.3	0.544
598	4.59	34.24	0.38	400	5.82	34.14	0.72	26.92	119.6	0.668
797	4.16	34.40	0.38	500	5.28	34.20	0.58	27.03	109.6	0.784
994	3.62	34.45	0.47	600	4.59	34.24	0.38	27.14	99.4	0.888
1198	3.08	34.45	0.63	700	4.27	34.31	0.38	27.23	91.4	0.893
				800	4.15	34.40	0.38	27.32	84.3	1.071
				1000	3.61	34.45	0.47	27.41	75.9	1.231

43.60 BLACK DOUGLAS; September 13, 1950; 1413 GCT; 40°28'N, 125°43'W; sounding, 1,580 fm; wind, 310°, force 1; weather, overcast; sea, slight; wire angle, 10°.

0	16.00	32.63E	5.92	0	16.00	32.63	5.93	23.95	396.9	0.000
10	15.98	32.63	6.33	10	15.98	32.63	6.32	23.95	396.7	0.040
25	15.50	32.66	6.33	20	15.80	32.65	6.34	24.01	391.7	0.079
50	11.50	32.65	6.17	30	15.15	32.66	6.30	24.16	377.6	0.118
75	8.80	32.63	6.37	50	11.50	32.65	6.17	24.87	309.2	0.186
98	8.24	32.70	6.00	75	8.80	32.63	6.37	25.32	267.8	0.258
152	7.94	33.66	3.37	100	8.20	32.74	5.99	25.49	251.3	0.323
200	7.96	33.95	1.85	150	7.95	33.63	3.45	26.23	182.5	0.432
293	6.99	34.04	1.70	200	7.96	33.95	1.85	26.48	159.6	0.517
396	6.18	34.11	1.06	250	7.65	34.01	1.70	26.57	151.7	0.595
489	5.16	34.08	0.82	300	6.91	34.04	1.67	26.70	139.9	0.668
587	4.94	34.20	0.49	400	6.15	34.11	1.05	26.85	126.1	0.801
779	4.16	34.27	0.38	500	5.10	34.08	0.78	26.96	116.3	0.922
969	3.75	34.40	0.52	600	4.93	34.22	0.45	27.09	105.0	1.033
1170	3.28	34.49	0.61	700	4.54	34.26	0.38	27.16	98.3	1.135
				800	4.08	34.28	0.40	27.22	92.3	1.230
				1000	3.69	34.42	0.52	27.38	79.1	1.401

47.55 BLACK DOUGLAS; September 13, 1950; 0336 GCT; 40°04'N, 124°55'W; sounding, 660 fm; wind, calm; weather, overcast; sea, slight; wire angle, 3°.

0	12.52	33.15E	5.53	0	12.52	33.15	5.53	25.08	289.3	0.000
10	10.68	33.39	3.56r	10	10.68	33.39	5.36	25.60	239.8	0.026
28	9.56	33.60	5.06	20	9.65	33.59	5.19	25.93	208.5	0.049
52	9.46	33.60	4.80	30	9.55	33.60	5.05	25.96	206.4	0.070
77	8.93	33.68	4.19	50	9.46	33.60	4.84	25.97	205.4	0.111
95	8.34	33.78	2.93	75	9.12	33.66	4.29	26.07	196.2	0.161
155	7.58	33.89	2.65	100	8.27	33.80	2.88	26.31	173.6	0.207
202	7.20	34.05	2.27	150	7.65	33.88	2.67	26.47	159.7	0.290
299	6.57	34.14	1.08	200	7.21	34.04	2.31	26.66	142.5	0.366
402	5.97	34.23	0.75	250	6.89	34.11	1.65	26.75	133.7	0.435
498	5.52	34.27	0.58	300	6.57	34.14	1.07	26.82	128.0	0.501
597	4.96	34.31	0.42	400	5.99	34.23	0.75	26.97	115.1	0.622
697	4.71	34.31	0.34	500	5.51	34.27	0.58	27.06	107.3	0.733
798	4.12	34.33	0.37	600	4.95	34.31	0.42	27.16	98.5	0.836
995	3.58	34.45	0.52	700	4.71	34.31	0.35	27.18	96.7	0.934
				800	4.11	34.33	0.38	27.26	89.0	1.026
				1000	(3.56)	(34.45)	(0.53)	(27.42)	(75.3)	(1.191)

E Evaporation (see page 281).

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

BLACK DOUGLAS; September 13, 1950; 0724 GCT; 39°54'N, 125°18'W; sounding, 1,500 fm; wind, calm; weather, overcast; sea, slight; wire angle, 10°. 47.60

0	14.55	32.84E	5.70	0	14.55	32.84	5.70	24.43	351.4	0.000	
10	14.27	32.84	5.78	10	14.27	32.84	5.78	24.48	346.0	0.035	
25	13.53	32.81	5.65	20	14.08	32.82	5.66	24.51	344.0	0.070	
49	8.97	32.77	5.63	30	11.00	32.80	5.65	25.09	289.2	0.101	
73	8.92	33.06	5.44	50	8.97	32.77	5.63	25.40	259.5	0.156	
99	7.95	33.40	3.79	75	8.91	33.10	5.39	25.67	234.5	0.218	
151	7.56	33.86	2.71	100	7.95	33.42	3.75	26.06	197.3	0.272	
199	7.02	33.91	2.28	150	7.57	33.86	2.75	26.46	160.0	0.361	
296	6.22	34.02	1.54	200	7.02	33.91	2.27	26.58	149.6	0.438	
395	6.02	34.13	0.65	250	6.56	33.96	1.86	26.68	140.4	0.511	
492	5.52	34.22	0.52	300	6.20	34.02	1.52	26.77	132.1	0.579	
592	5.09	34.25	0.39	400	6.02	34.13	0.63	26.88	122.9	0.706	
790	4.12	34.34	0.30	500	5.49	34.22	0.51	27.02	110.7	0.823	
986	3.66	34.42	0.49	600	5.05	34.25	0.38	27.10	104.2	0.930	
1190	3.16	34.49	0.64	700	4.58	34.29	0.32	27.18	96.6	1.031	
				800	4.09	34.35	0.31	27.28	87.3	1.124	
				1000	3.63	34.43	0.50	27.39	77.6	1.288	

BLACK DOUGLAS; September 12, 1950; 2023 GCT; 39°30'N, 124°30'W; sounding, 1,140 fm; wind, 300°, force 1; weather, overcast; sea, slight; wire angle, 4°. 50.55

0	11.16	33.15E	6.24	0	11.16	33.15	6.24	25.33	265.6	0.000	
10	10.85	33.21	6.51	10	10.85	33.21	6.51	25.43	256.0	0.026	
25	10.47	33.22	6.17	20	10.58	33.22	6.37	25.49	250.9	0.051	
50	9.27	33.62	3.87	30	10.29	33.23	5.93	25.54	245.6	0.076	
76	8.62	33.75	3.06	50	9.27	33.62	3.87	26.02	201.0	0.121	
100	8.08	33.82	2.85	75	8.65	33.75	3.10	26.22	182.5	0.169	
153	7.85	34.00	2.08	100	8.08	33.82	2.85	26.36	169.4	0.213	
202	7.32	34.05	1.64	150	7.85	33.99	2.12	26.52	154.3	0.293	
298	6.48	34.13	1.09	200	7.37	34.05	1.66	26.64	144.0	0.368	
398	6.16	34.23	0.67	250	6.80	34 09	1.35	26.75	134.0	0.437	
494	5.52	34.23	0.51	300	6.47	34.13	1.08	26.83	127.4	0.503	
595	5.08	34.31	0.39	400	6.15	34.23	0.66	26.95	117.1	0.626	
793	4.04	34.35	0.35	500	5.50	34.23	0.51	27.03	110.1	0.739	
987	3.62	34.42	0.49	600	5.04	34.31	0.38	27.15	99.6	0.844	
1165	3.18	34.49	0.73	700	4.54	34.35	0.35	27.23	91.6	0.940	
				800	4.02	34.35	0.35	27.29	86.4	1.028	
				1000	3.60	34.43	0.51	27.40	77.3	1.192	

BLACK DOUGLAS; September 12, 1950; 1618 GCT; 39°20'N, 124°52'W; sounding, 1,610 fm; wind, 300°, force 2; weather, clear; sea, moderate; wire angle, 10°. 50.60

0	13.30	32.88E	6.22	0	13.30	32.88	6.22	24.71	323.9	0.000	
10	13.28	32.84	6.23	10	13.28	32.84	6.23	24.69	326.6	0.033	
25	11.00	32.86	6.00	20	12.75	32.86	6.04	24.81	315.6	0.065	
49	9.59	32.86	5.92	30	10.62	32.86	5.98	25.20	278.4	0.094	
73	8.21	32.99	5.54	50	9.55	32.86	5.91	25.38	261.6	0.148	
99	8.04	33.22	4.73	75	8.20	33.03	5.51	25.72	229.4	0.210	
153	7.89	33.80	3.24	100	8.02	33.23	4.70	25.90	212.4	0.265	
202	7.32	33.95	2.55	150	7.90	33.78	3.31	26.35	170.6	0.361	
299	6.14	34.04	1.76	200	7.38	33.94	2.58	26.55	152.3	0.441	
399	5.50	34.09	1.26	250	6.58	34.01	2.13	26.72	137.0	0.514	
496	5.10	34.14	0.71	300	6.12	34.04	1.75	26.80	129.5	0.580	
597	4.55	34.22	0.46	400	5.50	34.09	1.26	26.92	119.3	0.704	
796	4.00	34.33	0.37	500	5.08	34.14	0.69	27.01	111.6	0.820	
992	3.58	34.42	0.45	600	4.53	34.22	0.45	27.13	100.2	0.926	
1195	3.12	34.49	0.74	700	4.19	34.29	0.37	27.22	92.0	1.022	
				800	4.00	34.33	0.36	27.28	87.7	1.112	
				1000	3.57	34.42	0.47	27.39	77.7	1.278	

E Evaporation (see page 281).

SIO

CCOFI 5009.

OBSERVED					INTERPOLATED					COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m
50.70	BLACK DOUGLAS; September 12, 1950; 0931 GCT; 39°00'N, 125°36.5'W; sounding, 2,120 fm; wind, 320°, force 2; weather, clear; sea, moderate; wire angle, 25°.											
0	15.49	-	5.51		0	15.49	(32.54)	5.51		(23.99)	(392.7)	(0.000)
9	15.50	32.54E	5.71		10	15.50	32.54	5.71		23.99	392.9	0.039
22	14.78	32.68	5.61		20	15.49	32.67	5.62		24.09	383.7	0.078
50	10.86	32.66	6.28		30	13.25	32.68	5.66		24.57	338.4	0.114
72	-	32.61	5.72		50	10.86	32.66	6.28		25.00	297.4	0.178
99	8.18	32.66	5.84		75	8.61	32.61	5.71		25.33	266.5	0.248
145	8.62	33.51	4.07		100	8.18	32.66	5.83		25.43	257.0	0.314
189	7.24	33.77	3.52		150	8.62	33.58	4.01		26.09	195.9	0.427
276	6.47	33.95	2.29		200	7.07	33.80	3.44		26.49	158.4	0.516
366	5.76	34.00	1.32		250	6.64	33.90	2.74		26.62	146.0	0.591
454	5.37	34.11	0.87		300	6.30	33.97	1.98		26.72	137.1	0.662
541	4.96	34.14	0.25		400	5.56	34.03	1.12		26.86	124.5	0.793
715	4.33	34.27	0.32		500	5.18	34.14	0.53		26.99	112.8	0.912
923	3.74	34.37	0.39		600	4.72	34.17	0.25		27.07	106.1	1.021
1095	3.30	34.42	0.58		700	4.37	34.26	0.32		27.18	96.1	1.123
					800	4.07	34.32	0.35		27.26	89.3	1.215
					1000	3.54	34.40	0.44		27.38	78.8	1.383
50.80	BLACK DOUGLAS; September 12, 1950; 0151 GCT; 38°40'N, 126°21'W; sounding, 2,370 fm; wind, 340°, force 3; weather, clear; sea, moderate; wire angle, 13°.											
0	17.22	32.47E	5.79		0	17.22	32.47	5.79		23.55	435.3	0.000
10	17.23	32.48	5.19		10	17.23	32.48	5.19		23.55	435.1	0.044
25	17.07	32.48	5.77		20	17.14	32.48	5.42		23.57	433.4	0.087
49	16.79	32.50	6.25		30	17.06	32.48	5.95		23.59	431.9	0.130
72	13.02	32.79	6.33		50	16.78	32.50	6.26		23.67	424.8	0.216
95	11.04	32.72	6.16		75	12.80	32.78	6.32		24.74	323.7	0.309
145	9.13	33.03	5.47		100	10.78	32.72	6.11		25.06	292.8	0.387
188	8.38	33.51	4.01		150	9.01	33.06	5.34		25.62	240.3	0.520
272	7.71	33.92	2.46		200	8.24	33.62	3.70		26.18	188.2	0.627
361	6.67	33.98	1.59		250	7.84	33.87	2.75		26.43	164.7	0.715
445	6.11	34.09	1.20		300	7.48	33.95	2.15		26.55	154.5	0.795
535	5.62	34.14	0.68		400	6.36	34.02	1.36		26.65	135.5	0.940
712	4.66	34.27	0.36		500	5.82	34.13	0.92		26.91	121.6	1.069
891	4.10	34.34	0.41		600	5.29	34.18	0.50		27.01	112.4	1.186
1084	3.57	34.49	0.61		700	4.73	34.26	0.36		27.14	100.6	1.291
					800	4.32	34.32	0.36		27.23	92.2	1.389
					1000	3.79	34.42	0.52		27.37	80.3	1 560
50.90	BLACK DOUGLAS; September 11, 1950; 1831 GCT; 38°20'N, 127°05'W; sounding, 2,460 fm; wind, 310°, force 3; weather, cloudy; sea, rough; wire angle, missing.											
0	17.59	32.56E	5.13		0	17.59	32.56	5.13		23.53	437.1	0.000
10	17.49	32.54	5.40		10	17.49	32.54	5.40		23.53	436.6	0.044
26	17.32	32.79	5.32		20	17.39	32.78	5.33		23.74	417.2	0.086
51	14.49	32.75	5.62		30	17.25	32.78	5.34		23.78	414.3	0.128
75	12.45	32.81	5.47		50	15.60	32.75	5.62		24.13	381.0	0.207
99	11.00	32.79	5.15		75	12.45	32.81	5.47		24.83	315.0	0.295
153	9.25	33.03	4.91		100	10.91	32.79	5.14		25.09	289.9	0.370
201	8.66	33.57	4.01		150	9.30	33.01	4.92		25.54	248.5	0.504
298	7.87	34.00	1.86		200	8.67	33.55	4.10		26.06	199.8	0.616
399	7.07	34.09	1.36		250	8.23	33.86	2.50		26.37	171.2	0.710
496	6.07	34.13	1.16		300	7.85	34.00	1.84		26.53	156.0	0.791
597	5.41	34.16	0.75		400	7.07	34.09	1.35		26.71	139.9	0.939
795	4.74	34.36	0.32		500	6.05	34.13	1.15		26.88	124.6	1.072
988	4.03	34.42	0.39		600	5.40	34.16	0.74		26.98	115.2	1.192
1189	3.58	34.49	0.55		700	5.02	34.25	0.42		27.10	104.9	1.301
					800	4.72	34.36	0.32		27.22	94.1	1.400
					1000	3.99	34.42	0.40		27.35	82.6	1.577

E Evaporation (see page 281).

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

BLACK DOUGLAS; September 11, 1950; 1103 GCT; 38°00'N, 127°49'W; sounding, 2,510 fm; wind, 310°, force 2; weather, overcast; sea, rough; wire angle, 11°. 50.100

0	15.99	32.59E	5.52	0	15.99	32.59	5.52	23.92	399.6	0.000
10	15.70	32.66	5.77	10	15.70	32.66	5.77	24.04	388.6	0.039
25	14.54	32.81	5.28	20	15.50	32.80	5.50	24.19	374.4	0.078
49	11.54	32.81	5.99	30	13.45	32.81	5.25	24.33	361.9	0.114
74	10.35	32.94	6.05	50	11.51	32.81	5.99	25.00	297.6	0.180
98	7.94	32.77	5.72	75	10.30	32.94	6.04	25.32	268.1	0.251
151	8.03	33.55	4.07	100	7.94	32.77	5.69	25.56	245.4	0.315
200	8.12	33.98	2.19	150	8.02	33.50	4.12	26.12	193.1	0.425
295	7.12	34.07	1.70	200	8.12	33.98	2.19	26.48	159.8	0.513
392	6.08	34.09	1.23	250	7.87	34.04	1.85	26.56	152.6	0.591
486	5.46	34.16	0.75	300	7.05	34.07	1.69	26.70	139.6	0.664
583	5.06	34.23	0.47	400	6.02	34.09	1.20	26.85	125.9	0.797
774	4.34	34.34	0.30	500	5.39	34.17	0.70	26.99	113.2	0.917
965	3.78	34.43	0.51	600	4.99	34.24	0.44	27.10	104.2	1.025
1167	3.32	34.47	0.75	700	4.63	34.29	0.32	27.18	97.2	1.126
				800	4.25	34.36	0.32	27.27	88.4	1.219
				1000	3.69	34.44	0.56	27.39	77.6	1.385

BLACK DOUGLAS; September 11, 1950; 0334 GCT; 37°40'N, 128°33'W; sounding, 2,600 fm; wind, 350°, force 3; weather, partly cloudy; sea, very rough; wire angle, 39°. 50.110

0	18.48	32.90E	5.17	0	18.48	32.90	5.17	23.57	433.0	0.000
8	18.45	32.99	5.05	10	18.45	32.99	5.06	23.65	426.1	0.043
23	18.16	32.83	5.76	20	18.20	32.83	5.73	23.58	432.2	0.086
43	15.16	32.94	5.91	30	18.03	32.84	5.82	23.63	427.8	0.129
59	13.26	32.92	6.22	50	14.22	32.94	6.10	24.57	338.7	0.205
86	11.09	32.88	5.86	75	12.02	32.90	6.03	24.98	300.6	0.285
126	9.10	32.95	5.37	100	10.15	32.88	5.68	25.29	270.6	0.357
162	8.26	33.40	4.46	150	8.46	33.08	4.85	25.72	230.6	0.482
233	7.90	33.93	2.63	200	8.08	33.85	3.18	26.38	168.9	0.582
306	6.98	34.02	2.34	250	7.73	33.96	2.52	26.52	156.5	0.663
377	6.49	34.07	1.36	300	7.05	34.01	2.38	26.65	144.1	0.738
447	5.75	34.13	1.06	400	6.32	34.09	1.22	26.81	129.8	0.875
588	4.91	34.23	0.53	500	5.31	34.18	0.87	27.01	111.5	0.996
742	4.34	34.34	0.32	600	4.86	34.24	0.50	27.11	102.6	1.103
919	3.80	34.58r	0.42	700	4.50	34.31	0.35	27.21	94.1	1.201
				800	4.15	(34.37)	0.32	(27.29)	(86.5)	(1.291)
				1000	(3.65)					

BLACK DOUGLAS; September 10, 1950; 2003 GCT; 37°20'N, 129°16.5'W; sounding, 2,600 fm; wind, 360°, force 3; weather, cloudy; sea, rough; wire angle, 14°. 50.120

0	18.90	33.03E	5.31	0	18.90	33.03	5.31	23.56	433.8	0.000
10	18.82	33.04	5.40	10	18.82	33.04	5.40	23.59	431.2	0.043
24	18.79	33.06	5.13	20	18.81	33.06	5.18	23.61	429.9	0.086
48	16.43	33.04	6.02	30	18.79	33.06	5.18	23.61	429.7	0.129
73	12.26	32.81	6.72	50	16.05	33.03	6.10	24.24	370.2	0.209
97	10.21	32.75	6.28	75	12.08	32.80	6.71	24.89	309.0	0.294
150	9.26	33.31	3.76	100	10.15	32.75	6.18	25.19	280.2	0.368
199	8.50	33.77	2.61	150	9.26	33.33	3.76	25.79	224.2	0.494
294	7.42	34.00	2.59	200	8.49	33.77	2.61	26.26	180.8	0.596
393	6.45	34.04	1.40	250	7.87	33.93	2.59	26.47	160.7	0.681
487	5.25	34.09	0.89	300	7.37	34.00	2.58	26.60	149.2	0.758
587	4.69	34.13	0.69	400	6.37	34.04	1.34	26.79	134.1	0.900
780	4.16	34.34	0.36	500	5.14	34.10	0.85	26.97	115.3	1.024
973	3.73	34.43	0.71	600	4.65	34.14	0.66	27.06	107.5	1.136
1173	3.28	34.52	0.80	700	4.37	34.24	0.49	27.17	97.8	1.238
				800	4.10	34.35	0.35	27.28	87.4	1.331
				1000	3.65	34.44	0.76	27.40	77.1	1.495

E Evaporation (see page 281).

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

50.130 BLACK DOUGLAS; September 9, 1950; 1152 GCT; 37°00'N, 130°00'W; sounding, 2,680 fm; wind, 360°, force 3; weather, partly cloudy; sea, very rough; wire angle, 16°.

0	19.24	33.04E	5.08	0	19.24	33.04	5.08	23.48	441.3	0.000
10	19.25	33.06	5.23	10	19.25	33.06	5.23	23.50	440.1	0.044
26	19.24	33.06	5.43	20	19.25	33.06	5.39	23.50	440.5	0.088
49	17.31	33.06	5.45	30	19.24	33.06	5.45	23.50	440.5	0.132
73	14.68	33.03	5.79	50	17.31	33.06	5.46	23.97	395.9	0.216
95	12.40	32.99	5.91	75	14.32	33.02	5.81	24.61	335.5	0.307
148	9.47	33.13	5.07	100	12.05	32.99	5.92	25.04	295.1	0.386
190	8.38	33.58	4.08	150	9.41	33.14	5.01	25.62	240.6	0.520
273	7.52	34.02	2.46	200	8.24	33.76	3.86	26.29	177.9	0.624
350	6.34	34.04	1.86	250	7.70	33.98	2.82	26.54	154.6	0.708
435	5.49	34.07	1.63	300	7.24	34.03	2.19	26.64	145.2	0.782
522	4.91	34.14	0.93	400	5.75	34.06	1.70	26.86	124.7	0.917
703	4.35	34.33	0.39	500	5.05	34.12	1.16	26.99	112.8	1.036
877	3.80	34.40	0.37	600	4.60	34.21	0.56	27.12	101.7	1.143
1079	3.42	34.52	0.55	700	4.35	34.32	0.40	27.23	91.6	1.240
				800	4.06	34.38	0.35	27.31	84.7	1.328
				1000	3.53	34.47	0.46	27.43	73.5	1.486

53.54 BLACK DOUGLAS; September 6, 1950; 2114 GCT; 38°58'N, 124°00'W; sounding, 210 fm; wind, 160°, force 2; weather, overcast; sea, high; wire angle, 9°.

0	11.34	33.15E	6.13	0	11.34	33.15	6.13	25.20	277.2	0.000
10	11.26	33.08	6.14	10	11.26	33.08	6.14	25.17	281.0	0.028
25	9.56	32.99	5.60	20	11.24	33.00	5.97	25.10	287.3	0.056
50	9.28	33.42	5.07	30	9.44	33.00	5.47	25.51	249.2	0.083
74	8.99	33.69	3.59	50	9.28	33.42	5.07	25.86	216.1	0.130
98	8.52	33.86	3.68	75	8.98	33.71	3.59	26.13	190.4	0.180
153	-	33.93	2.95	100	8.51	33.87	3.67	26.33	171.9	0.226
202	7.30	33.95	2.63	150	7.89	33.92	2.99	26.46	160.1	0.308
251	6.90	33.96	2.52	200	7.34	33.95	2.64	26.57	151.0	0.387
				250	6.90	33.96	2.52	26.64	145.0	0.460

53.64 BLACK DOUGLAS; September 7, 1950; 0400 GCT; 38°38'N, 124°44'W; sounding, 2,040 fm; wind, 300°, force 2; weather, overcast; sea, high; wire angle, 13°.

0	12.11	32.84E	6.19	0	12.11	32.84	6.19	24.91	304.9	0.000
10	12.08	32.86	6.25	10	12.08	32.86	6.25	24.94	302.9	0.030
25	11.31	32.77	6.10	20	12.07	32.79	6.13	24.88	308.3	0.061
50	8.54	32.70	6.17	30	9.70	32.74	6.10	25.26	272.5	0.090
73	7.94	32.79	5.85	50	8.54	32.70	6.17	25.41	258.3	0.143
96	8.22	33.13	5.15	75	7.95	32.80	5.80	25.58	242.9	0.206
151	-	33.77	3.56	100	8.22	33.17	5.04	25.83	219.7	0.264
192	8.15	34.04	2.07	150	8.20	33.76	3.60	26.29	176.4	0.363
279	6.74	34.09	1.75	200	8.09	34.05	2.03	26.54	154.2	0.445
372	6.00	34.15	1.03	250	7.25	34.08	1.82	26.68	140.9	0.519
467	5.47	34.22	0.64	300	6.49	34.10	1.65	26.80	129.9	0.586
561	5.03	34.27	0.43	400	5.86	34.17	0.85	26.94	117.9	0.710
758	4.40	34.36	0.23	500	5.33	34.24	0.57	27.06	107.3	0.823
960	3.62	34.42	0.35	600	4.88	34.29	0.37	27.15	99.2	0.926
1160	3.19	34.34	0.64	700	4.56	34.33	0.27	27.22	93.4	1.022
				800	4.27	34.38	0.23	27.29	87.2	1.113
				1000	3.49	34.41	0.40	27.39	77.5	1.278

57.54 BLACK DOUGLAS; September 6, 1950; 1514 GCT; 38°24'N, 123°35'W; sounding, 120 fm; wind, 090°, force 2; weather, overcast; sea, very rough; wire angle, 0°.

0	10.29	32.98E	6.16	0	10.29	32.98	6.16	25.35	263.3	0.000
10	10.36	33.06	6.12	10	10.36	33.06	6.12	25.40	258.9	0.026
25	8.84	33.01	5.02	20	8.87	33.01	5.05	25.60	239.6	0.051
50	9.69	33.28	5.63	30	8.90	33.01	5.05	25.60	240.3	0.075
75	9.70	33.41	5.56	50	9.69	33.28	5.63	25.68	232.7	0.122
100	8.86	33.48	4.49	75	9.70	33.41	5.56	25.78	223.7	0.179
155	-	33.96	-	100	8.86	33.48	4.49	25.97	206.1	0.233
206	8.03	34.03	2.47	150	8.39	33.91	3.33	26.38	168.1	0.326
				200	8.06	34.03	2.56	26.52	155.2	0.408

E Evaporation (see page 281).

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
BLACK DOUGLAS; September 7, 1950; 1020 GCT; 38°04'N, 124°19'W; sounding, 2,130 fm; wind, 030°, force 2; weather, overcast; sea, rough; wire angle, 10°.													57.64
0	13.52	32.90E	6.17		0	13.52	32.90	6.17		24.68	326.7	0.000	
10	13.50	32.88	6.07		10	13.50	32.88	6.07		24.67	328.0	0.033	
25	13.49	32.88	6.07		20	13.50	32.88	6.07		24.67	328.3	0.066	
49	10.33	33.17	5.73		30	13.50	32.88	6.06		24.67	328.5	0.098	
74	10.04	33.40	5.33		50	10.32	33.19	5.72		25.51	249.5	0.156	
98	9.03	33.62	3.86		75	10.04	33.41	5.31		25.73	229.2	0.216	
150	8.54	33.96	2.25		100	9.01	33.64	3.61		26.07	196.5	0.269	
197	7.55	33.96	2.79		150	8.54	33.96	2.25		26.40	166.6	0.360	
289	6.67	34.04	1.66		200	7.52	33.96	2.78		26.55	152.7	0.439	
388	5.98	34.11	1.06		250	6.95	33.99	2.21		26.65	143.4	0.514	
481	5.42	34.14	0.70		300	6.62	34.05	1.57		26.74	135.3	0.583	
579	5.27	34.27	0.55		400	5.89	34.12	1.01		26.89	122.0	0.712	
769	4.58	34.36	0.39		500	5.37	34.15	0.66		26.98	114.4	0.830	
958	4.04	34.45	0.46		600	5.24	34.29	0.52		27.11	103.6	0.939	
1158	3.54	34.47	0.82		700	4.88	34.34	0.44		27.19	96.5	1.039	
					800	4.46	34.37	0.40		27.26	90.2	1.132	
					1000	3.93	34.46	0.52		27.39	79.0	1.302	
BLACK DOUGLAS; September 7, 1950; 1742 GCT; 37°37'N, 123°37'W; sounding, 1,870 fm; wind, 070°, force 1; weather, overcast; sea, rough; wire angle, 0°.													60.60
0	12.86	33.42E	5.78		0	12.86	33.42	5.78		25.22	275.9	0.000	
10	12.70	33.40	5.78		10	12.70	33.40	5.78		25.23	274.7	0.027	
25	12.72	33.42	5.84		20	12.73	33.41	5.82		25.24	274.8	0.055	
50	11.30	33.51	5.84		30	12.73	33.43	5.85		25.25	273.5	0.082	
75	9.53	33.68	3.69		50	11.30	33.51	5.84		25.54	246.7	0.134	
101	8.64	33.73	3.44		75	9.53	33.68	3.69		26.02	201.1	0.190	
155	8.44	34.02	2.20		100	8.64	33.73	3.44		26.20	184.2	0.239	
203	7.86	34.09	1.80		150	8.45	34.00	2.29		26.44	162.3	0.325	
300	7.04	34.20	1.04		200	7.92	34.09	1.82		26.59	148.8	0.403	
402	6.14	34.20	0.78		250	7.39	34.16	1.47		26.72	136.9	0.474	
499	5.66	34.29	0.67		300	7.04	34.20	1.04		26.80	129.8	0.541	
599	5.04	34.27	0.40		400	6.17	34.20	0.78		26.92	119.6	0.666	
800	4.24	34.42	0.30		500	5.66	34.29	0.67		27.06	107.7	0.780	
996	3.65	34.47	0.45		600	5.04	34.27	0.40		27.11	102.6	0.885	
1199	3.20	34.51	0.67		700	4.54	34.32	0.32		27.21	93.9	0.983	
					800	4.24	34.42	0.30		27.32	83.7	1.072	
					1000	3.64	34.47	0.46		27.42	74.8	1.230	
BLACK DOUGLAS; September 7, 1950; 2353 GCT; 37°17'N, 124°21'W; sounding, 2,200 fm; wind, 080°, force 1; weather, cloudy; sea, very rough; wire angle, 10°.													60.70
0	11.34	33.31E	6.27		0	11.34	33.31	6.27		25.42	256.7	0.000	
10	10.86	33.31	6.24		10	10.86	33.31	6.24		25.51	248.7	0.025	
26	10.32	33.25	5.96		20	10.53	33.27	6.04		25.53	246.4	0.050	
49	9.94	33.24	5.72		30	10.27	33.24	5.94		25.55	244.6	0.075	
74	9.33	33.46	4.41		50	9.82	33.24	5.70		25.63	237.7	0.123	
99	8.74	33.62	3.96		75	9.32	33.47	4.37		25.89	213.4	0.179	
152	7.99	33.84	2.96		100	8.74	33.63	3.94		26.11	193.1	0.230	
200	7.38	33.96	2.43		150	8.02	33.83	3.01		26.37	168.6	0.320	
295	6.52	34.05	1.83		200	7.38	33.96	2.43		26.57	150.8	0.401	
394	5.96	34.14	1.04		250	6.88	34.02	2.10		26.69	140.2	0.473	
490	5.63	34.22	0.59		300	6.49	34.06	1.80		26.77	132.8	0.542	
590	5.20	34.31	0.43		400	5.94	34.14	1.01		26.90	121.1	0.668	
785	4.38	34.38	0.36		500	5.59	34.23	0.57		27.02	111.2	0.785	
978	3.83	34.42	0.53		600	5.16	34.32	0.43		27.14	100.4	0.891	
1179	3.35	34.47	0.59		700	4.72	34.36	0.37		27.22	93.1	0.987	
					800	4.32	34.38	0.35		27.28	87.8	1.078	
					1000	3.77	34.42	0.56		27.37	80.0	1.245	

E Evaporation (see page 281).

S10

CCOFI 5009

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

60.80 BLACK DOUGLAS; September 8, 1950; 0619 GCT; 36°57'N, 125°04'W; sounding, 2,400 fm; wind, 060°, force 1; weather, overcast; sea, very rough; wire angle, 6°.

0	16.13	32.99E	5.78	0	16.13	32.99	5.78	24.20	373.2	0.000
10	15.35	32.99	5.80	10	15.35	32.99	5.80	24.37	357.1	0.037
25	11.72	32.84	6.11	20	12.90	32.85	6.00	24.77	319.1	0.070
50	9.46	32.95	5.56	30	11.00	32.84	6.11	25.12	286.2	0.101
75	8.83	33.44	4.43	50	9.46	32.95	5.56	25.46	253.7	0.155
99	8.49	33.64	3.63	75	8.83	33.44	4.43	25.95	208.0	0.212
153	7.68	33.87	3.00	100	8.49	33.64	3.60	26.15	188.7	0.262
201	7.26	33.98	2.96	150	7.72	33.86	3.02	26.44	162.1	0.349
295	6.16	33.98	2.05	200	7.27	33.98	2.96	26.60	147.8	0.428
395	5.23	34.02	1.56	250	6.79	33.98	2.67	26.67	142.0	0.500
491	4.69	34.11	0.73	300	6.11	33.98	2.02	26.75	133.9	0.568
591	4.74	34.25	0.34	400	5.18	34.02	1.54	26.90	120.7	0.695
789	4.12	34.52r	0.39	500	4.67	34.12	0.67	27.04	108.3	0.810
983	3.68	34.43	0.55	600	4.74	(34.26)	0.33	(27.14)	(99.7)	(0.915)
1187	3.22	34.51	0.78	700	4.46	(34.36)	0.35	(27.25)	(90.0)	(1.010)
				800	4.10	(34.40)	0.40	(27.32)	(83.8)	(1.097)
				1000	3.64	34.43	0.57	27.39	78.1	(1.258)

60.90 BLACK DOUGLAS; September 8, 1950; 1341 GCT; 36°37'N, 125°47'W; sounding, 2,480 fm; wind, 020°, force 2; weather, cloudy; sea, rough; wire angle, 24°.

0	16.95	33.19E	5.66	0	16.95	33.19	5.66	24.16	376.6	0.000
11	16.93	33.18	5.62	10	16.93	33.18	5.62	24.16	377.1	0.038
22	16.92	33.21	5.62	20	16.92	33.20	5.62	24.17	376.0	0.075
47	10.37	33.53	5.29	30	16.92	33.37	5.58	24.30	363.9	0.112
68	8.15	33.53	4.69	50	9.84	33.53	5.19	25.85	216.6	0.170
93	8.48	33.77	3.18	75	8.20	33.54	4.27	26.12	191.5	0.221
143	7.83	34.02	2.39	100	8.46	33.87	2.99	26.34	171.2	0.267
187	7.39	34.04	2.13	150	7.74	34.02	2.34	26.56	150.5	0.347
276	6.48	34.05	1.63	200	7.30	34.04	2.08	26.64	143.7	0.421
373	5.70	34.09	1.07	250	6.78	34.05	1.79	26.72	136.7	0.491
459	5.23	34.16	0.77	300	6.25	34.06	1.49	26.80	129.7	0.557
554	4.91	34.27	0.52	400	5.54	34.11	0.96	26.93	118.3	0.681
741	4.24	34.33	0.43	500	5.08	34.21	0.65	27.06	106.4	0.794
925	3.72	34.43	0.49	600	4.77	34.30	0.45	27.17	97.1	0.896
1123	3.25	34.49	0.72	700	4.40	34.33	0.42	27.23	91.5	0.990
				800	4.04	34.35	0.42	27.29	86.7	1.079
				1000	3.54	34.46	0.58	27.43	74.4	1.240

60.100 BLACK DOUGLAS; September 8, 1950; 2023 GCT; 36°17'N, 126°30'W; sounding, 2,540 fm; wind, 360°, force 3; weather, overcast; sea, rough; wire angle, 16°.

0	16.93	33.11E	5.74	0	16.93	33.11	5.74	24.10	382.0	0.000
10	16.92	33.08	5.67	10	16.92	33.08	5.67	24.08	384.4	0.038
24	16.91	33.08	5.56	20	16.92	33.08	5.58	24.08	384.7	0.077
48	11.90	33.03	6.14	30	16.91	33.08	5.61	24.08	384.8	0.115
72	10.18	33.19	5.18	50	11.67	33.03	6.11	25.14	284.2	0.182
95	8.70	33.33	4.71	75	9.91	33.20	5.11	25.58	242.6	0.248
146	8.07	33.78	3.22	100	8.59	33.38	4.58	25.94	209.5	0.304
191	7.74	33.93	1.74	150	8.04	33.80	3.06	26.35	171.1	0.400
280	6.70	34.02	1.65	200	7.68	33.94	1.71	26.51	156.5	0.481
373	5.84	34.04	1.08	250	7.12	34.00	1.66	26.64	145.0	0.557
462	5.36	34.11	0.77	300	6.48	34.03	1.60	26.75	134.9	0.627
555	4.97	34.28	0.46	400	5.66	34.05	0.93	26.87	124.3	0.756
740	4.36	34.34	0.33	500	5.18	34.17	0.65	27.02	110.6	0.874
930	3.82	34.43	0.46	600	4.81	34.32	0.39	27.18	96.1	0.977
1125	3.34	34.48	0.69	700	4.49	34.34	0.33	27.23	91.8	1.071
				800	4.20	34.36	0.35	27.28	87.8	1.161
				1000	3.65	34.46	0.54	27.41	75.7	1.324

E Evaporation (see page 281).

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
BLACK DOUGLAS; September 9, 1950; 0313 GCT; 35°57'N, 127°12'W; sounding, 2,620 fm; wind, 350°, force 3; weather, cloudy; sea, rough; wire angle, 13°.													60.110
0	16.61	32.84E	5.53		0	16.61	32.84	5.53		23.97	394.8	0.000	
10	16.56	32.84	5.77		10	16.56	32.84	5.77		23.98	394.0	0.039	
26	16.31	32.83	5.67		20	16.31	32.83	5.70		24.03	389.5	0.078	
50	14.92	32.92	5.96		30	16.26	32.83	5.70		24.04	388.7	0.118	
74	12.04	32.79	6.40		50	14.92	32.92	5.96		24.41	354.4	0.192	
98	10.16	32.74	5.77		75	11.93	32.79	6.39		24.91	307.1	0.274	
152	8.67	33.13	5.05		100	10.00	32.74	5.74		25.21	278.5	0.348	
199	8.32	33.66	3.79		150	8.70	33.10	5.08		25.70	232.7	0.475	
292	7.33	34.00	2.13		200	8.32	33.66	3.76		26.20	186.4	0.581	
392	6.42	34.07	1.38		250	7.89	33.90	2.71		26.45	163.2	0.668	
485	5.70	34.14	0.86		300	7.24	34.01	2.05		26.63	146.7	0.745	
583	5.10	34.22	0.69		400	6.37	34.07	1.34		26.79	131.9	0.884	
775	4.42	34.33	0.38		500	5.61	34.15	0.82		26.95	117.4	1.009	
967	3.77	34.40	0.47		600	5.02	34.23	0.67		27.08	105.3	1.120	
1171	3.32	34.47	0.78		700	4.64	34.30	0.49		27.18	96.6	1.221	
					800	4.36	34.34	0.39		27.25	91.2	1.315	
					1000	3.68	34.41	0.41		27.37	79.7	1.486	
BLACK DOUGLAS; September 9, 1950; 0933 GCT; 35°37'N, 127°54.5'W; sounding, 2,610 fm; wind, 350°, force 4; weather, cloudy; sea, very rough; wire angle, 10°.													60.120
0	18.59	33.03E	5.41		0	18.59	33.03	5.41		23.64	426.2	0.000	
10	18.58	33.03	5.59		10	18.58	33.03	5.59		23.65	426.0	0.043	
25	18.58	33.03	5.28		20	18.58	33.03	5.31		23.64	426.6	0.085	
49	16.80	33.03	5.77		30	18.57	33.03	5.33		23.65	426.6	0.128	
74	15.12	32.95	5.96		50	16.77	33.03	5.79		24.08	385.9	0.209	
99	13.03	32.88	6.08		75	15.07	32.95	5.97		24.40	356.0	0.302	
152	10.29	32.77	5.67		100	12.95	32.88	6.08		24.78	319.8	0.386	
201	8.87	33.37	4.47		150	10.35	32.77	5.74		25.17	283.0	0.537	
295	7.74	33.98	2.46		200	8.91	33.36	4.50		25.87	217.5	0.662	
393	6.48	34.04	1.85		250	8.23	33.82	3.25		26.33	174.1	0.760	
486	5.87	34.11	1.06		300	7.67	33.99	2.41		26.55	154.2	0.842	
584	5.23	34.22	0.63		400	6.41	34.04	1.81		26.76	134.7	0.986	
777	4.32	34.31	0.40		500	5.78	34.13	0.99		26.91	121.1	1.114	
966	3.88	34.43	0.55		600	5.13	34.23	0.60		27.07	106.7	1.228	
1170	3.31	34.47	0.68		700	4.62	34.28	0.43		27.17	97.8	1.330	
					800	4.25	34.32	0.41		27.24	91.4	1.423	
					1000	3.80	34.45	0.57		27.39	78.2	1.594	
BLACK DOUGLAS; September 9, 1950; 1628, 1714 GCT; 35°17'N, 128°37'W; sounding, 2,580 fm; wind, 350°, force 4; weather, overcast; sea, very rough; wire angle, 14°, 33°.													60.130
0	17.96	32.92E	5.30		0	17.96	32.92	5.30		23.71	419.2	0.000	
10	17.96	32.95	5.40		10	17.96	32.95	5.40		23.74	417.3	0.042	
24	17.95	32.92	5.54		20	17.95	32.92	5.50		23.71	419.8	0.084	
49	17.92	32.92	5.45		30	17.95	32.92	5.54		23.71	420.1	0.126	
72	-	32.90	6.28		50	17.91	32.92	5.45		23.72	419.8	0.209	
96	14.10	32.81	6.14		75	15.55	32.89	6.27		24.25	370.4	0.308	
145	9.75	32.90	5.85		100	13.75	32.81	6.11		24.57	340.3	0.397	
189	8.92	33.35	4.63		150	9.66	32.92	5.80		25.41	260.8	0.548	
274	7.96	33.95	2.78		200	8.91	33.37	4.55		25.88	216.8	0.667	
					250	8.25	33.86	3.20		26.36	171.5	0.764	
347	7.36	34.05	1.66		300	7.71	34.00	2.31		26.55	154.1	0.846	
434	6.23	34.07	1.41		400	6.74	34.07	1.44		26.74	136.9	0.990	
526	5.63	34.14	0.88		500	5.76	34.12	1.04		26.91	121.6	1.120	
702	4.68	34.29	0.44		600	5.27	34.21	0.60		27.04	109.9	1.235	
844	4.30	34.38	0.44		700	4.70	34.29	0.44		27.17	98.0	1.339	
986	3.77	34.45	0.62		800	4.37	34.38	0.44		27.28	88.4	1.432	
					1000	(3.74)	(34.46)	(0.64)		(27.41)	(76.7)	(1.597)	

E Evaporation (see page 281).

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

61.55 BLACK DOUGLAS; September 6, 1950; 0555 GCT; 37°37'N, 123°07.5'W; sounding, 460 fm; wind, 270°, force 2; weather, overcast; sea, very rough; wire angle, 14°.

0	12.09	33.49E	5.95	0	12.09	33.49	5.95	25.42	256.8	0.000
10	12.09	33.49	5.49	10	12.09	33.49	5.49	25.42	257.1	0.026
25	12.10	33.49	4.84	20	12.10	33.49	5.00	25.42	257.3	0.051
49	9.69	33.42	4.58	30	11.35	33.48	4.76	25.55	245.0	0.076
73	8.66	33.64	2.88	50	9.64	33.42	4.57	25.80	221.6	0.123
98	8.90	33.87	2.63	75	8.66	33.68	2.86	26.16	187.8	0.174
141	10.87r	33.95	1.41r	100	8.93	33.88	2.61	26.27	177.5	0.220
185	8.62	34.01	1.81	150	8.85	33.96	2.10	26.35	171.3	0.307
228	8.36	34.05	1.34	200	8.50	34.02	1.77	26.45	162.5	0.391
271	7.83	34.11	1.79	250	8.14	34.08	1.78	26.55	153.6	0.470
364	6.77	34.14	1.37	300	7.45	34.13	1.72	26.69	140.7	0.544
456	6.05	34.20	0.86	400	6.48	34.16	1.15	26.85	126.7	0.676
552	5.60	34.23	0.51	500	5.83	34.22	0.68	26.98	115.1	0.797
651	5.00	34.34	0.45	600	5.32	34.27	0.46	27.08	106.1	0.909
747	4.60	34.38	0.40	700	4.76	34.37	0.42	27.23	92.8	1.008

70.55 CREST; September 7, 1950; 0536 GCT; 36°03.5'N, 122°01.5'W; sounding, 760 fm; wind, 090°, force 2; weather, partly cloudy; sea, slight; wire angle, 0°.

0	13.79	–	6.00	–	0	13.79	(33.42)	6.00	(1.14)	(25.03)	(293.4)	(0.000)
10	13.33	33.44	5.89	1.17	10	13.33	33.44	5.89	1.17	25.17	280.8	0.029
24	12.02	33.37	5.61	1.40	20	12.88	33.39	5.68	1.30	25.19	279.0	0.057
50	10.25	33.46	4.61	1.91	30	11.45	33.37	5.38	1.56	25.45	245.9	0.083
75	9.62	33.75	3.81	2.03	50	10.25	33.46	4.61	1.91	25.73	228.4	0.132
100	9.12	33.80	3.09	2.22	75	9.62	33.75	3.81	2.03	26.07	196.9	0.185
153	8.24	33.98	2.29	2.49	100	9.12	33.80	3.09	2.22	26.18	186.2	0.233
202	7.97	34.07	1.48	2.74	150	8.27	33.97	2.33	2.48	26.45	161.9	0.320
300	7.40	34.18	1.10	2.93	200	7.98	34.07	1.50	2.72	26.57	150.8	0.398
401	6.71	34.25	0.69	3.25	250	7.74	34.13	1.19	2.86	26.65	144.0	0.472
500	5.89	34.29	0.49	3.31	300	7.40	34.18	1.10	2.93	26.74	136.2	0.542
603	5.70	34.31	0.43	3.38	400	6.72	34.25	0.70	3.25	26.89	123.3	0.671
804	4.77	34.38	0.31	3.42	500	5.89	34.29	0.49	3.31	27.03	110.6	0.789
1000	4.02	34.45	0.70r	3.57	600	5.70	34.31	0.43	3.38	27.07	108.0	0.898
1203	3.40	34.58	0.55	3.38	700	5.31	34.34	0.40	3.40	27.14	101.9	1.003
					800	4.77	34.38	0.32	3.42	27.23	93.2	1.101
					1000	4.02	34.45	0.39	3.57	27.37	80.7	1.274

70.60 CREST; September 7, 1950; 0901 GCT; 35°53'N, 122°23'W; sounding, 1,700 fm; wind, 140°, force 1; weather, overcast; sea, moderate; wire angle, 3°.

0	14.77	33.40	6.01	0.57	0	14.77	33.40	6.01	0.57	24.81	314.6	0.000
10	14.65	33.33	5.96	0.67	10	14.65	33.33	5.96	0.67	24.78	317.8	0.032
25	11.80	33.44	5.57	1.38	20	12.60	33.36	5.75	1.14	25.22	276.0	0.061
50	9.81	33.68	4.04	1.93	30	11.23	33.51	5.25	1.54	25.60	240.7	0.087
75	9.22	33.73	3.46	2.18	50	9.81	33.68	4.04	1.93	25.97	205.8	0.132
98	8.99	33.91	2.55	2.30	75	9.22	33.73	3.46	2.18	26.11	192.4	0.182
151	8.39	34.13	2.34	2.49	100	8.96	33.93	2.52	2.31	26.31	174.2	0.227
199	8.20	34.22	1.60	2.60	150	8.40	34.13	2.35	2.49	26.55	151.9	0.309
295	7.44	34.25	1.26	2.90	200	8.19	34.22	1.58	2.60	26.65	143.1	0.383
397	6.72	34.25	1.02	3.21	250	7.84	34.24	1.35	2.75	26.72	137.3	0.453
493	5.93	34.33	0.56	3.35	300	7.40	34.25	1.23	2.92	26.79	131.1	0.520
594	5.30	34.36	0.44	3.40	400	6.69	34.25	1.02	3.22	26.89	122.8	0.647
794	4.58	34.42	0.40	3.42	500	5.88	34.34	0.54	3.36	27.07	106.8	0.762
991	3.99	34.49	0.26	3.51	600	5.27	34.36	0.43	3.40	27.16	98.8	0.865
1189	3.24	34.63	0.55	3.37	700	4.89	34.39	0.40	3.40	27.23	92.9	0.960
					800	4.56	34.42	0.40	3.42	27.29	87.7	1.051
					1000	3.94	34.50	0.26	3.51	27.42	76.1	1.214

E Evaporation (see page 281).

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	70.70
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
CREST; September 7, 1950; 1440, 1512 GCT; 35°35'N, 123°05.5'W; sounding, 2,050 fm; wind, 200°, force 2; weather, overcast; sea, moderate; wire angle, 10°, 15".													
0	15.88	-	5.89	0.61	0	15.88	(33.32)	5.89	0.61	(24.50)	(344.1)	(0.000)	
10	15.40	33.35	5.84	0.64	10	15.40	33.35	5.84	0.64	24.63	331.8	0.034	
25	14.89	33.41	5.88	0.76	20	15.00	33.40	4.85	0.72	24.76	320.1	0.066	
49	12.18	32.88	6.18	1.11	30	14.79	33.41	5.90	0.83	24.81	315.3	0.098	
73	9.26	33.10	5.60	1.35	50	12.18	32.88	6.17	1.12	24.93	304.7	0.160	
96	8.84	33.45	4.51	1.78	75	9.24	33.14	5.55	1.39	25.65	236.6	0.228	
150	7.88	33.77	3.26	2.17	100	8.76	33.48	4.35	1.82	25.99	204.6	0.283	
196	7.32	34.05	2.91	2.43	150	7.88	33.77	3.26	2.17	26.35	171.1	0.377	
290	6.98	34.30	1.21	2.98	200	7.29	34.07	2.83	2.46	26.67	141.4	0.455	
389	6.36	34.33	0.62	3.09	250	7.11	34.23	1.90	2.79	26.82	127.8	0.522	
484	5.60	34.28	0.46	3.12	300	6.94	34.31	1.12	3.00	26.90	120.3	0.584	
					400	6.25	34.33	0.59	3.10	27.01	111.0	0.699	
631	5.04	34.41	0.39	3.25	500	5.52	34.28	0.44	3.13	27.06	106.7	0.808	
831	4.32	34.42	0.43	-	600	5.16	34.39	0.40	3.22	27.19	95.2	0.910	
1031	3.75	34.54	0.65	3.37	700	4.76	34.41	0.40	(3.28)	27.26	89.9	1.002	
1235	3.32	34.52	0.92	3.34	800	4.41	34.41	0.41	(3.32)	27.30	86.6	1.091	
					1000	3.83	34.53	0.60	(3.36)	27.45	72.6	1.250	
CREST; September 7, 1950; 2226, 2022 GCT; 35°16.5'N, 123°48'W; sounding, 2,200 fm; wind, 230°, force 2; weather, cloudy; sea, very rough; wire angle, 4°, 3°.													70.80
0	16.75	33.40	5.83	0.43	0	16.75	33.40	5.83	0.43	24.37	357.0	0.000	
10	16.68	33.42	5.74	0.49	10	16.68	33.42	5.74	0.49	24.40	354.3	0.036	
25	16.15	33.40	5.82	0.53	20	16.25	33.41	5.79	0.52	24.49	345.9	0.071	
50	10.02	33.08	5.62	1.30	30	15.00	33.30	5.82	0.60	24.68	327.7	0.104	
74	9.85	33.55	4.65	1.73	50	10.02	33.08	5.62	1.30	25.47	252.6	0.162	
98	9.25	33.80	3.38	2.11	75	9.84	33.56	4.52	1.75	25.88	214.9	0.221	
151	8.23	34.00	2.58	2.38	100	9.14	33.80	3.33	2.13	26.18	186.6	0.271	
195	8.13	34.18	1.77	2.96r	150	8.24	33.99	2.59	2.37	26.47	160.0	0.357	
296	7.40	34.29	-	2.57	200	8.13	34.19	(1.72)	(2.46)	26.64	144.4	0.433	
399	6.48	34.29	0.82	3.04	250	7.84	34.27	(1.34)	(2.53)	26.75	135.1	0.503	
498	5.62	34.27	0.59	3.18	300	7.38	34.29	(1.15)	(2.58)	26.83	127.9	0.569	
601	4.86	34.36	0.40	3.21	400	6.47	34.29	0.82	3.05	26.95	116.9	0.691	
806	4.22	34.45	0.43	3.40	500	5.58	34.27	0.59	3.19	27.05	108.2	0.804	
1007	3.77	34.51	0.60	3.21r	600	4.86	34.36	0.40	3.21	27.21	93.7	0.905	
1205	3.40	34.58	0.85	3.17r	700	4.72	34.45	0.51	3.29	27.29	86.4	0.995	
					800	4.25	34.45	0.44	3.39	27.34	81.7	1.079	
639	4.84	34.45	0.54r	3.51r	1000	3.82	34.50	0.60	3.40	27.43	74.7	1.236	
1066	3.63	34.58	0.62	3.41	1200	3.41	34.58	0.80	3.34	27.53	65.9	1.372	
1280	3.16	34.60	0.93	3.33	1500	2.73	34.65	1.22	3.33	27.65	54.8	1.553	
1604	2.66	34.66	1.33	3.34	2000	2.06	34.71	1.69	3.13	27.76	44.7	1.801	
1873	2.21	34.66	1.58	3.17	2500	1.76	34.78	2.31	3.04	27.83	37.7	2.008	
2142	1.98	34.79	1.85	3.10	3000	1.64	34.74	2.84	2.91	27.82	40.6	2.204	
2414	1.79	34.78	2.23	3.05									
2688	1.73	34.81	2.47	2.97									
2987	1.64	34.74	2.84	2.91									
3340	1.60	34.71	2.88	2.93									

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
70.90	CREST; September 8, 1950; 0406 GCT; 34°57.5'N, 124°31'W; sounding, 2,350 fm; wind, 240°, force 2; weather, overcast; sea, very rough; wire angle, 0°.											
0	16.76	33.24	5.86	0.52	0	16.76	33.24	5.86	0.52	24.24	369.1	0.000
15	16.69	33.30	5.71	0.55	10	16.72	33.29	5.75	0.53	24.29	364.7	0.037
40	13.61	33.10	5.92	0.86	20	16.67	33.30	5.75	0.61	24.30	363.1	0.073
65	10.49	32.99	5.55	1.22	30	16.63	33.21	5.87	0.72	24.25	369.1	0.110
90	9.55	33.26	4.88	1.54	50	12.32	33.04	5.85	1.00	25.03	295.1	0.176
144	8.66	33.62	4.24	1.99	75	10.05	33.06	5.20	1.36	25.45	255.2	0.246
193	8.06	34.00	2.76	2.32	100	9.30	33.33	4.72	1.64	25.79	223.9	0.305
292	6.77	34.11	1.74	2.69	150	8.58	33.65	4.15	2.04	26.15	190.2	0.409
393	5.89	34.13	0.97	3.11	200	7.95	34.02	2.65	2.35	26.53	154.4	0.494
489	5.28	34.22	0.70	3.26	250	7.23	34.09	2.10	2.55	26.69	139.8	0.567
592	5.09	34.29	0.25	3.32	300	6.68	34.11	1.67	2.72	26.78	131.6	0.636
790	4.24	34.40	0.43	3.39	400	5.82	34.14	0.93	3.13	26.92	119.6	0.761
987	3.70	34.58r	0.65	3.44	500	5.26	34.23	0.67	3.27	27.06	107.1	0.875
1191	3.27	34.56r	0.85	3.35r	600	5.08	34.29	0.25	3.32	27.13	101.6	0.979
1198	3.27	34.51	0.88	3.41	700	4.65	34.35	0.31	3.36	27.22	93.0	1.076
					800	4.19	34.40	0.43	3.40	27.31	84.7	1.165
					1000	3.65	34.47	0.65	3.44	27.47	75.3	1.326
70.100	CREST; September 8, 1950; 0928 GCT; 34°39'N, 125°13.5'W; sounding, 2,470 fm; wind, 320°, force 3; weather, overcast; sea, very rough; wire angle, 15°.											
0	18.01	33.26	5.46	0.61	0	18.01	33.26	5.46	0.61	23.96	395.8	0.000
10	18.04	33.28	5.42	0.54	10	18.04	33.28	5.42	0.54	23.97	395.1	0.040
24	18.02	33.28	–	0.60	20	18.02	33.28	(5.39)	0.56	23.97	395.2	0.079
53	10.34	33.23	5.28	–	30	18.00	33.27	(5.36)	(0.70)	23.97	395.8	0.119
77	9.17	33.40	4.48	1.74	50	11.75	33.23	(5.29)	(1.20)	25.28	270.9	0.185
106	8.68	33.69	3.43	2.03	75	9.25	33.38	4.55	(1.71)	25.83	218.9	0.247
158	8.10	33.95	2.81	2.39	100	8.76	33.64	3.56	1.98	26.11	192.7	0.298
209	7.51	34.03	2.27	2.61	150	8.18	33.92	2.89	2.35	26.42	164.3	0.387
312	6.10	34.00	1.84	2.81	200	7.61	34.02	2.35	2.58	26.58	149.5	0.465
421	5.20	34.13	0.88	3.26	250	6.96	34.03	2.05	2.70	26.68	140.6	0.538
524	5.18	34.23	0.43	3.46	300	6.26	34.00	1.90	2.79	26.75	134.3	0.607
628	4.74	34.30	0.12r	3.43r	400	5.29	34.09	1.05	3.18	26.94	116.8	0.732
833	3.94	34.40	0.67r	3.56	500	5.20	34.21	0.45	3.43	27.05	107.9	0.844
1042	3.44	34.47	0.62	3.41	600	4.89	34.28	(0.43)	(3.52)	27.14	100.0	0.948
1245	3.07	34.50	0.98	3.40	700	4.40	34.35	(0.43)	(3.56)	27.25	90.0	1.043
					800	4.04	34.39	(0.45)	(3.56)	27.32	83.7	1.130
					1000	3.52	34.46	(0.59)	3.45	27.43	74.1	1.289
70.110	CREST; September 8, 1950; 1505 GCT; 34°20'N, 125°55.5'W; sounding, 2,500 fm; wind, 320°, force 3; weather, overcast; sea, very rough; wire angle, 45°.											
0	17.56	33.03	5.64	0.65	0	17.56	33.03	5.64	0.65	23.89	402.7	0.000
8	17.58	33.04	5.51	0.67	10	17.60	33.04	5.51	0.68	23.89	402.7	0.040
18	17.56	–	5.59	0.71	20	17.55	33.03	5.65	0.73	23.89	402.6	0.081
40	13.80	32.95	6.08	0.95	30	17.55	33.01	5.86	0.82	23.88	404.4	0.121
57	11.62	32.77	6.20	1.12	50	12.25	32.78	6.18	1.05	24.84	313.0	0.193
77	9.76	32.77	5.88	1.34	75	10.05	32.77	5.92	1.30	25.23	276.6	0.266
111	9.12	33.25	4.79	1.81	100	9.55	32.87	5.17	1.62	25.39	261.8	0.334
137	8.38	33.58	3.83	2.34	150	8.50	33.71	(3.52)	2.46	26.21	184.5	0.446
195	7.98	33.98	–	2.71	200	7.90	33.99	(2.83)	2.74	26.52	155.9	0.530
257	7.10	34.00	2.27	2.86	250	7.18	34.00	(2.34)	2.85	26.63	145.8	0.605
316	6.43	34.04	1.78	2.91	300	6.61	34.03	1.91	2.89	26.73	136.7	0.676
375	5.86	34.09	1.13	3.19	400	5.75	34.12	0.91	3.27	26.91	120.2	0.805
496	5.48	34.23	0.50	3.40	500	5.45	34.23	0.49	3.40	27.03	109.5	0.920
632	4.65	34.27	0.38	3.41	600	4.82	34.26	0.37	3.40	27.13	100.7	1.025
798	4.22	34.38	0.42	3.41	700	4.41	34.32	0.39	3.41	27.22	92.3	1.121
					800	(4.19)	(34.38)	(0.43)	(3.41)	(27.30)	(86.2)	(1.210)

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

CREST; September 8, 1950; 2043 GCT; 34°01'N, 126°38'W; sounding, 2,580 fm; wind, 330°, force 4; weather, cloudy; sea, rough; wire angle, 18°. 70.120

0	18.76	33.19	5.46	0.44	0	18.76	33.19	5.46	0.44	23.72	418.8	0.000
10	18.73	33.22	5.50	0.40	10	18.73	33.22	5.50	0.40	23.75	416.0	0.042
28	18.68	33.24	5.32	0.51	20	18.70	33.24	5.40	0.49	23.77	414.1	0.083
57	13.06	33.03	-	0.56	30	18.68	33.24	(5.33)	0.52	23.78	414.0	0.125
85	11.20	32.97	6.15	0.77	50	15.85	33.06	(5.60)	0.54	24.31	363.7	0.202
113	10.18	33.06	5.73	1.12	75	11.65	32.98	(6.07)	0.66	25.11	288.1	0.284
169	8.30	33.49	4.80	1.54	100	10.65	32.99	5.97	0.98	25.29	270.7	0.354
223	8.06	33.89	4.76r	1.71r	150	8.61	33.35	5.10	1.42	25.91	212.8	0.474
331	6.70	34.09	2.72	2.53	200	8.12	33.78	(4.35)	(1.74)	26.32	174.6	0.572
434	5.56	34.20	1.51	3.10	250	7.87	33.96	(3.70)	(2.05)	26.50	158.5	0.655
544	4.99	34.20	0.71	3.23	300	7.20	34.04	(3.08)	(2.35)	26.66	143.9	0.730
647	4.52	34.29	0.47	3.26	400	5.78	34.18	1.90	2.96	26.95	116.1	0.860
865	3.94	-	0.38	3.59	500	5.20	34.20	0.94	3.21	27.04	108.6	0.972
1079	3.41	34.52	0.64	3.44	600	4.70	34.24	0.55	3.25	27.13	100.7	1.077
1290	3.02	-	0.98	3.21	700	4.37	(34.34)	0.41	3.33	(27.24)	(90.4)	(1.172)
					800	4.11	(34.42)	0.37	3.53	(27.34)	(82.3)	(1.259)
					1000	3.58	(34.51)	0.48	3.51	(27.39)	(78.3)	(1.420)

CREST; September 9, 1950; 0208 GCT; 33°33'N, 127°16.5'W; sounding, 2,400 fm; wind, 320°, force 3; weather, cloudy; sea, rough; wire angle, 16°. 70.130

0	19.42	33.24	5.38	0.47	0	19.42	33.24	5.38	0.47	23.59	430.9	0.000
10	19.43	33.24	5.06	0.42	10	19.43	33.24	5.06	0.42	23.59	431.4	0.043
25	19.37	33.28	5.10	0.49	20	19.40	33.26	5.07	0.47	23.61	429.6	0.086
54	14.66	33.17	5.71	0.46	30	19.30	33.28	5.20	0.49	23.65	426.0	0.129
76	13.18	33.12	5.88	0.49	50	15.65	33.18	5.65	0.46	24.45	350.6	0.207
107	10.98	32.90	5.87	0.69	75	13.25	33.12	5.87	0.49	24.91	307.2	0.289
156	9.48	33.15	5.15	1.19	100	11.30	32.91	5.88	0.63	25.12	287.7	0.363
206	8.51	33.80	4.92	1.51	150	9.62	33.06	5.20	1.14	25.52	249.8	0.497
307	7.20	33.98	2.95	2.43	200	8.61	33.79	4.97	1.47	26.25	181.1	0.605
413	5.82	34.07	1.69	3.04	250	7.93	33.89	4.05	1.93	26.43	164.6	0.692
515	5.12	34.20	0.75	3.40	300	7.30	33.97	3.07	2.38	26.59	150.5	0.770
618	4.72	34.27	0.53	3.55	400	5.95	34.06	1.82	2.98	26.84	127.2	0.909
822	4.11	34.40	0.37	3.59	500	5.19	34.19	0.87	3.36	27.03	109.3	1.027
1032	3.63	34.54	0.65	3.55	600	4.77	34.26	0.53	3.53	27.14	100.1	1.132
1235	3.19	34.54	0.83	3.37	700	4.45	34.33	0.44	3.59	27.23	92.1	1.228
					800	4.16	34.38	0.38	3.60	27.30	85.9	1.317
					1000	3.69	34.53	0.59	3.57	27.47	70.9	1.473

CREST; September 9, 1950; 0941 GCT; 33°05.5'N, 128°20'W; sounding, 2,400 fm; wind, 360°, force 3; weather, cloudy; sea, rough; wire angle, 25°. 70.145

0	19.73	33.50	5.38	0.35	0	19.73	33.50	5.38	0.35	23.71	419.8	0.000
9	19.74	33.53	4.95	0.37	10	19.74	33.54	4.96	0.37	23.74	417.3	0.042
22	19.74	33.57	5.27	0.40	20	19.74	33.56	5.16	0.39	23.75	416.2	0.084
45	19.71	33.58	5.08	0.44	30	19.74	33.58	5.26	0.42	23.77	415.0	0.125
67	15.90	33.40	5.73	0.37	50	18.50	33.57	5.16	0.43	24.08	386.4	0.205
89	14.56	33.28	5.61	0.46	75	15.32	33.34	5.71	0.39	24.64	332.7	0.295
135	11.51	33.25	5.37	0.80	100	13.75	33.26	5.58	0.53	24.92	307.3	0.375
176	10.47	33.60	4.50	1.47	150	11.11	33.34	5.10	1.02	25.48	253.8	0.515
258	8.36	33.98	2.97	2.16	200	9.62	33.78	3.98	1.74	26.08	197.6	0.628
345	7.26	34.05	2.09	2.61	250	8.43	33.96	3.11	2.11	26.41	166.7	0.720
428	5.90	34.12	1.67	2.89	300	7.85	34.03	2.45	2.40	26.56	153.9	0.799
515	5.34	34.13	0.93	3.11	400	6.17	34.10	1.83	2.81	26.84	127.0	0.940
690	4.32	34.29	0.44	3.30	500	5.43	34.13	1.04	3.07	26.96	116.7	1.062
869	4.02	34.40	0.45	3.39	600	4.79	34.19	0.60	3.23	27.08	105.5	1.173
1069	3.59	34.49	0.67	3.39	700	4.28	34.30	0.45	3.30	27.22	92.3	1.272
					800	4.11	34.37	0.45	3.36	27.30	86.0	1.361
					1000	3.75	34.48	0.58	3.39	27.42	75.4	1.522

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

70.160 CREST; September 9, 1950; 1702 GCT; 32°40'N, 129°24'W; sounding, 2,400 fm; wind, 320°, force 4; weather, cloudy; sea, rough; wire angle, 20°.

0	20.16	33.71	5.44	0.35	0	20.16	33.71	5.44	0.35	23.76	415.3	0.000
10	20.21	33.69	4.89	0.36	10	20.21	33.69	4.89	0.36	23.73	417.9	0.042
23	20.15	33.68	5.26	0.42	20	20.16	33.68	5.18	0.42	23.73	417.9	0.083
51	19.72	33.87r	5.68	0.40	30	20.13	33.66	5.40	0.42	23.73	419.0	0.125
75	15.48	33.40	5.72	0.47	50	19.80	33.55	5.66	0.40	23.73	419.4	0.209
102	15.62	33.92	5.58	0.42	75	15.48	33.40	5.72	0.47	24.65	332.1	0.303
152	12.65	33.64	5.35	0.79	100	15.80	33.92	5.60	0.42	24.98	301.3	0.382
201	10.34	33.84	4.77	1.38	150	12.70	33.64	5.37	0.76	25.42	260.5	0.523
299	7.94	33.99	3.87	1.99	200	10.44	33.83	4.80	1.36	25.98	207.4	0.639
401	6.34	34.13	2.36	2.83	250	8.92	33.93	4.32	1.72	26.31	176.4	0.735
501	5.17	34.13	1.50	3.26	300	7.93	33.99	3.87	2.00	26.51	158.0	0.819
600	4.64	34.27	0.87	3.35	400	6.36	34.13	2.39	2.83	26.84	127.3	0.962
798	4.26	34.40	0.45	3.50	500	5.18	34.13	1.50	3.26	26.99	113.6	1.083
1001	3.76	34.47	0.70	3.58	600	4.64	34.27	0.87	3.35	27.16	97.9	1.188
1201	3.24	34.50	0.86	3.50	700	4.44	34.35	0.55	3.42	27.24	90.4	1.282
					800	4.25	34.40	0.45	3.50	27.30	85.4	1.370
					1000	3.76	34.47	0.70	3.58	27.41	76.1	1.531

70.175 CREST; September 10, 1950; 0223, 0013 GCT; 32°03'N, 130°21'W; sounding, 2,400 fm; wind, 340°, force 4; weather, cloudy; sea, moderate; wire angle, 14°, 19°.

0	20.65	33.89	5.10	0.33	0	20.65	33.89	5.10	0.33	23.76	414.4	0.000
10	20.68	33.89	5.28	0.35	10	20.68	33.89	5.28	0.35	23.76	415.2	0.041
24	20.59	33.91	5.12	0.42	20	20.62	33.91	5.13	0.41	23.79	412.9	0.083
48	17.92	33.62	5.48	0.39	30	20.57	33.90	5.18	0.42	23.79	412.7	0.124
72	16.12	33.59	5.62	0.45	50	17.15	33.62	5.50	0.39	24.44	351.5	0.201
96	15.90	33.80	5.49	0.36	75	16.08	33.59	5.61	0.45	24.67	330.7	0.286
148	13.21	33.67	5.31	0.61	100	15.85	33.80	5.48	0.37	24.88	311.1	0.366
195	9.85	33.57	4.70	1.29	150	13.10	33.67	5.30	0.62	25.36	265.9	0.510
290	8.11	34.03	2.78	2.23	200	9.70	33.57	4.59	1.39	25.91	214.4	0.630
388	6.46	34.06	2.67	2.46	250	8.75	33.71	3.16	1.93	26.17	190.1	0.731
483	5.46	34.13	1.51	2.98	300	7.94	34.04	2.75	2.26	26.55	154.4	0.818
584	4.88	34.27	0.78	3.27	400	6.30	34.06	2.60	2.50	26.79	131.7	0.961
782	4.24	34.40	0.55	3.37	500	5.33	34.15	1.34	3.04	26.99	113.9	1.084
977	3.90	34.50	0.60	3.38	600	4.83	34.27	0.71	3.29	27.14	100.0	1.191
1180	3.40	34.52	0.91	3.37	700	4.48	34.33	0.54	3.35	27.22	92.4	1.286
					800	4.20	34.42	0.55	3.37	27.33	83.4	1.375
622	4.76	34.28	0.59	3.65r	1000	3.84	34.49	0.66	3.38	27.42	75.7	1.534
1042	3.70	34.47	0.72	3.61r	1200	3.34	34.53	0.93	3.38	27.50	68.8	1.628
1252	3.18	34.54	1.01	3.50r	1500	2.75	34.56	1.26	3.48	27.58	61.5	1.823
1568	2.65	34.56	1.33	3.50	2000	2.07	34.60	1.85	3.30	27.67	53.1	2.109
1835	2.24	34.59	1.64	3.34	2500	1.77	34.63	2.11	3.10	27.72	48.8	2.365
2103	2.00	34.61	1.95	3.29	3000	1.58	34.68	2.50	2.96	27.77	44.1	2.597
2374	1.82	34.62	1.98	3.12								
2647	1.71	34.65	2.33	3.10								
2948	1.59	34.68	2.52	3.00								
3299	1.54	34.69	2.52	2.69								

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
CREST; September 10, 1950; 1100 GCT; 31°35'N, 131°29'W; sounding, 2,500 fm; wind, 360°, force 2; weather, overcast; sea, rough; wire angle, 25°.													70.190
0	20.62	33.77	5.27	0.43	0	20.62	33.77	5.27	0.43	23.68	422.3	0.000	
9	20.64	33.69	5.20	0.41	10	20.63	33.69	5.20	0.41	23.62	428.7	0.043	
22	20.60	33.73	5.28	0.44	20	20.62	33.73	5.25	0.43	23.65	425.9	0.085	
45	17.90	33.51	5.80	0.46	30	20.57	33.69	5.43	0.45	23.63	427.9	0.128	
67	16.14	33.42	5.99	0.40	50	16.85	33.47	5.88	0.45	24.40	355.6	0.206	
89	15.84	33.62	5.82	0.42	75	16.03	33.47	5.95	0.40	24.59	338.4	0.293	
138	13.60	33.77	5.68	0.41	100	15.63	33.69	5.77	0.41	24.84	314.4	0.375	
182	11.43	33.74	4.94	0.57	150	12.99	33.77	5.50	0.42	25.46	256.5	0.517	
269	8.44	34.00	3.86	1.07	200	10.75	33.75	4.66	0.67	25.87	218.5	0.636	
362	7.00	33.98	3.35	2.01	250	8.99	33.97	4.02	0.96	26.33	174.6	0.734	
450	6.29	34.13	1.59	2.30	300	7.81	33.99	3.64	1.37	26.53	156.3	0.817	
542	5.38	34.16	1.01	3.04	400	6.70	34.05	2.65	2.13	26.73	137.8	0.964	
726	4.42	34.34	0.46	3.34	500	5.80	34.14	1.25	2.77	26.92	120.6	1.093	
914	4.08	34.47	0.60	3.44	600	4.99	34.20	0.75	3.19	27.06	107.2	1.207	
					700	4.52	34.31	0.47	3.31	27.20	94.4	1.307	
					800	4.27	34.41	0.48	3.39	27.31	84.9	1.397	
					1000	(3.88)	(34.48)			(27.41)	(76.9)	(1.560)	
CREST; September 10, 1950; 1829 GCT; 30°56.5'N, 132°27'W; sounding, 2,560 fm; wind, 360°, force 3; weather, cloudy; sea, moderate; wire angle, 18°.													70.205
0	21.51	34.11	5.56	0.34	0	21.51	34.11	5.56	0.34	23.70	420.7	0.000	
10	21.52	34.11	5.70	0.29	10	21.52	34.11	5.70	0.29	23.70	421.3	0.042	
24	21.50	34.13	5.64	0.34	20	21.51	34.13	5.67	0.33	23.71	420.0	0.084	
52	18.21	34.02	4.82	0.37	30	21.48	34.13	5.50	0.35	23.72	419.5	0.126	
76	16.32	33.81	4.97	0.37	50	18.98	34.04	4.84	0.37	24.31	363.7	0.205	
103	15.74	33.95	5.00	0.40	75	16.35	33.81	4.97	0.37	24.77	320.5	0.290	
154	13.27	33.74	5.19	0.61	100	15.85	33.95	5.01	0.40	24.99	300.2	0.368	
204	10.09	33.78	4.78	1.26	150	13.60	33.75	5.20	0.59	25.32	269.8	0.510	
305	8.30	34.07	4.46	1.81	200	10.19	33.77	4.80	1.22	25.98	207.6	0.629	
410	6.52	34.04	2.95	2.50	250	9.15	33.91	4.62	1.56	26.26	181.5	0.727	
512	5.34	34.14	1.65	3.11	300	8.37	34.06	4.48	1.79	26.50	159.3	0.812	
614	4.68	34.14	0.96	3.29	400	6.70	34.04	3.10	2.42	26.72	138.5	0.961	
815	4.10	-	0.63	3.44	500	5.45	34.13	1.78	3.06	26.95	116.9	1.088	
1020	3.59	34.45	0.68	3.47	600	4.75	34.14	1.03	3.28	27.04	108.7	1.202	
1221	3.19	34.51	1.01	3.41	700	4.39	(34.18)	0.72	3.36	(27.12)	(102.5)	(1.306)	
					800	4.14	(34.25)	0.63	3.43	(27.20)	(95.3)	(1.405)	
					1000	3.64	(34.44)	0.65	3.47	(27.40)	(77.0)	(1.578)	
CREST; September 11, 1950; 0050 GCT; 30°33'N, 133°23'W; sounding, 2,500 fm; wind, 060°, force 3; weather, partly cloudy; sea, moderate; wire angle, 17°.													70.220
0	21.92	34.00	5.06	0.47	0	21.92	34.00	5.06	0.47	23.50	439.4	0.000	
10	21.73	33.96	5.07	0.43	10	21.73	33.96	5.07	0.43	23.52	437.7	0.044	
23	21.74	33.98	4.92	0.38	20	21.73	33.97	4.93	0.39	23.53	437.3	0.088	
52	18.01	34.02	5.71	0.35	30	21.50	33.99	5.07	0.37	23.61	430.2	0.131	
75	17.64	34.22	5.55	0.33	50	18.09	34.01	5.71	0.35	24.51	344.7	0.208	
104	17.18	34.25	5.43	0.35	75	17.64	34.22	5.55	0.33	24.78	319.8	0.292	
155	15.64	34.22	4.78	0.44	100	17.26	34.25	5.45	0.35	24.90	309.7	0.370	
205	12.25	33.87	4.88	0.90	150	15.85	34.23	4.80	0.43	25.21	281.3	0.518	
307	8.51	34.04	4.06	1.88	200	12.50	33.87	4.88	0.80	25.64	241.1	0.648	
414	6.68	34.05	3.94r	2.99	250	10.24	33.92	4.67	1.43	26.09	198.4	0.758	
516	5.90	34.18	3.37r	3.50	300	8.65	34.03	4.15	1.83	26.43	165.8	0.850	
615	4.85	34.18	0.87	3.69	400	6.81	34.05	(2.75)	2.81	26.72	139.3	1.002	
821	4.22	34.36	0.57	3.72	500	6.01	34.16	(1.60)	3.45	26.91	121.8	1.132	
1030	3.66	34.47	0.77	3.65	600	4.96	34.18	(0.94)	3.68	27.05	108.3	1.247	
1234	3.25	34.52	1.10	3.53	700	4.49	34.23	0.66	3.70	27.14	99.9	1.351	
					800	4.26	34.34	0.58	3.72	27.26	90.0	1.446	
					1000	3.73	34.45	0.73	3.67	27.40	77.3	1.614	

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OBSERVED					INTERPOLATED					COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m

70.235 CREST; September 11, 1950; 0739 GCT; 30°02'N, 134°23'W; sounding, 2,530 fm; wind, 020°, force 1; weather, rain; sea, slight; wire angle, 2°.

0	21.47	33.91	5.10	0.38	0	21.47	33.91	5.10	0.38	23.56	433.6	0.000
10	21.45	33.93	5.10	0.36	10	21.45	33.93	5.10	0.36	23.58	432.5	0.043
25	21.34	33.89	5.09	0.36	20	21.37	33.90	5.10	0.36	23.58	432.9	0.087
50	20.16	34.56	5.45	0.24	30	20.27	34.00	5.12	0.35	23.95	397.8	0.128
74	18.11	34.40	5.60	0.23	50	20.16	34.56	5.45	0.24	24.41	354.9	0.203
98	17.65	34.47	5.35	0.28	75	18.10	34.40	5.60	0.23	24.81	317.4	0.287
150	16.00	34.31	5.27	0.41	100	17.60	34.47	5.32	0.29	24.98	301.5	0.365
199	12.59	33.98	4.92	1.33	150	16.00	34.31	5.27	0.41	25.24	278.7	0.510
297	9.04	34.18	4.52	1.75	200	12.50	33.98	4.92	1.33	25.72	233.0	0.638
399	7.29	34.00	3.53	2.31	250	10.33	34.08	4.72	1.58	26.20	188.2	0.743
496	6.04	34.07	2.38	2.80	300	8.98	34.18	4.49	1.76	26.50	159.8	0.830
598	5.06	34.20	1.10	3.35	400	7.28	34.00	3.51	2.32	26.61	149.5	0.984
799	4.17	34.42	0.74	3.55	500	6.00	34.07	2.33	2.82	26.84	128.4	1.123
997	3.68	34.54	0.68	3.67	600	5.03	34.20	1.09	3.36	27.06	107.7	1.241
1203	3.27	34.56	0.99	3.40	700	4.52	34.33	0.81	3.49	27.22	92.9	1.342
					800	4.17	34.42	0.74	3.55	27.33	83.0	1.429
					1000	3.67	34.54	0.68	3.67	27.48	70.0	1.582

70.250 CREST; September 11, 1950; 1454 GCT; 29°37'N, 135°22'W; sounding, 2,530 fm; wind, calm; weather, drizzle; sea, moderate; wire angle, 7°.

0	21.99	34.72	5.06	0.24	0	21.99	34.72	5.06	0.24	24.03	389.5	0.000
10	22.05	34.90	5.08	0.26	10	22.05	34.90	5.08	0.26	24.16	377.1	0.038
25	22.00	34.87	4.96	0.20	20	22.00	34.89	5.01	0.22	24.15	378.0	0.076
50	20.84	34.79	5.29	0.15	30	21.98	34.84	4.98	0.19	24.12	381.4	0.114
75	20.35	34.97	5.44	0.16	50	20.84	34.79	5.29	0.15	24.39	356.1	0.188
98	19.04	34.90	5.37	0.18	75	20.35	34.97	5.44	0.16	24.67	335.3	0.274
152	15.74	34.22	5.00	0.40	100	19.04	34.68	5.35	0.18	24.79	320.5	0.356
201	13.23	34.14	4.97	0.81	150	15.92	34.23	5.01	0.39	25.19	282.8	0.507
296	9.40	34.05	4.40	1.66	200	13.25	34.14	4.97	0.80	25.70	235.7	0.636
397	7.52	34.00	3.37	2.21	250	10.77	34.10	4.80	1.30	26.14	194.2	0.744
495	6.10	34.07	2.14	2.80	300	9.30	34.05	4.37	1.69	26.35	174.5	0.837
595	5.10	34.13	1.18	3.33	400	7.48	34.00	3.35	2.23	26.59	152.4	0.999
796	4.21	34.33	0.51	3.52	500	6.07	34.07	2.10	2.84	26.83	129.3	1.140
992	3.65	34.45	0.56	3.56	600	5.06	34.13	1.15	3.34	27.00	113.2	1.262
1194	3.19	34.52	0.93	3.40	700	4.55	34.23	0.65	3.48	27.14	100.7	1.369
					800	4.19	34.33	0.52	3.53	27.26	89.9	1.464
					1000	3.63	34.45	0.55	3.56	27.41	76.2	1.630

70.265 CREST; September 11, 1950; 2110 GCT; 29°10'N, 136°18.5'W; sounding, 2,150 fm; wind, 060°, force, 3; weather, partly cloudy; sea, moderate; wire angle, 10°.

0	22.51	34.34	4.92	0.32	0	22.51	34.34	4.92	0.32	23.59	430.8	0.000
10	22.38	34.36	5.04	0.34	10	22.38	34.36	5.04	0.34	23.65	426.1	0.043
25	22.58	34.92	4.99	0.29	20	22.54	34.75	5.02	0.30	23.90	402.6	0.083
50	20.85	34.92	5.13	0.30	30	22.58	34.92	5.01	0.29	24.01	391.7	0.123
73	19.76	34.96	5.31	0.30	50	20.85	34.92	5.13	0.30	24.49	345.2	0.196
97	17.88	34.52	5.24	0.40	75	19.75	34.96	5.32	0.30	24.82	316.8	0.279
150	16.95	–	4.97	0.46	100	17.85	34.50	5.23	0.40	24.95	305.1	0.357
198	14.06	34.14	4.83	0.74	150	16.95	34.27	4.97	0.46	24.99	302.7	0.509
292	9.81	34.00	4.64	1.52	200	13.95	34.13	4.83	0.76	25.54	250.3	0.647
391	7.92	34.04	4.11	2.11	250	11.33	34.04	4.73	1.23	25.99	208.4	0.761
486	6.32	34.02	2.50	2.97	300	9.60	34.00	4.61	1.55	26.26	183.0	0.860
584	5.30	34.07	1.54	3.08	400	7.75	34.04	3.99	2.20	26.58	153.3	1.028
782	4.22	–	0.49	3.67	500	6.15	34.02	2.33	2.99	26.78	134.0	1.171
973	3.70	34.49	0.67	3.68	600	5.19	(34.09)	1.40	3.12	(26.95)	(117.8)	(1.297)
1172	3.27	34.49	0.95	3.67	700	4.61	(34.20)	0.69	3.50	(27.11)	(103.6)	(1.408)
					800	4.15	(34.32)	0.49	3.68	(27.25)	(90.2)	(1.505)
					1000	3.64	34.49	0.71	3.68	27.44	73.3	(1.668)

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
CREST; September 12, 1950; 0713, 0457 GCT; 28°33'N, 137°20.5'W; sounding, 2,580 fm; wind, 090°, force 3; weather, cloudy; sea, moderate; wire angle, 16°, 14°.													70.280
0	22.30	35.02	4.84	0.20	0	22.30	35.02	4.84	0.20	24.17	376.1	0.000	
10	22.30	35.04	4.87	0.21	10	22.30	35.04	4.87	0.21	24.18	374.8	0.038	
24	22.22	35.05	4.71	0.17	20	22.25	35.05	4.77	0.19	24.21	383.1	0.075	
48	21.24	35.16	4.62	0.12	30	22.17	35.09	4.66	0.15	24.26	368.5	0.112	
72	20.63	35.15	4.74	0.12	50	21.15	35.16	4.65	0.12	24.59	337.2	0.183	
95	19.54	35.08	4.97	0.15	75	20.56	35.14	4.77	0.12	24.74	324.3	0.265	
155	18.26	34.95	4.93	0.26	100	19.27	35.06	5.00	0.16	25.02	298.6	0.343	
191	-	34.53	4.71	0.47	150	18.39	34.96	4.93	0.25	25.16	286.2	0.489	
285	10.50	34.07	4.63	1.31	200	14.90	34.38	4.69	0.55	25.53	251.5	0.623	
381	8.24	34.05	3.79	1.83	250	11.90	34.13	4.65	1.00	25.95	212.1	0.739	
476	6.46	34.02	2.74	2.54	300	10.08	34.06	4.55	1.40	26.22	186.5	0.840	
573	5.32	34.05	1.70	3.02	400	7.84	34.04	3.58	1.93	26.56	154.6	1.010	
770	4.28	34.27	0.55	3.51	500	6.11	34.02	2.48	2.71	26.79	133.5	1.154	
971	3.61	34.43	0.60	3.50	600	5.14	34.08	1.37	3.11	26.95	117.9	1.280	
1169	3.27	34.54	0.97	3.47	700	4.61	34.21	0.67	3.42	27.12	102.9	1.390	
					800	4.16	34.30	0.56	3.51	27.23	91.8	1.487	
619	5.04	34.11	1.17	3.16	1000	3.60	34.45	0.62	3.49	27.41	75.8	1.655	
1035	3.60	34.47	0.67	3.72r	1200	3.19	34.54	1.04	3.46	27.52	66.0	1.797	
1245	3.09	34.53	1.12	3.61r	1500	2.66	34.57	1.40	3.48	27.60	59.7	1.986	
1560	2.56	34.59	1.44	3.49	2000	2.00	34.61	1.91	3.40	27.68	51.4	2.263	
1794	2.24	34.61	0.88r	3.48	2500	1.68	34.65	2.30	3.24	27.74	46.4	2.508	
1981	2.02	34.61	1.51r	3.35r									
2199	1.78	34.66	2.13	3.26									
2415	1.72	34.65	2.26	3.24									
2640	1.62	34.66	2.30	3.22									
2905	1.57	34.67	2.47	3.15									
CREST; September 19, 1950; 0323 GCT; 33°24'N, 117°55'W; sounding, 340 fm; wind, 320°, force 4; weather, partly cloudy; sea, moderate; wire angle, 20°.													90.30
0	19.32	33.62	5.49	0.50	0	19.32	33.62	5.49	0.50	23.91	400.8	0.000	
10	19.31	33.60	5.55	0.59	10	19.31	33.60	5.55	0.59	23.89	402.4	0.040	
23	16.67	33.53	6.04	1.16	20	17.00	33.55	6.03	1.00	24.42	352.3	0.078	
46	11.76	33.28	5.38	1.56	30	15.00	33.35	5.85	1.32	24.72	324.0	0.112	
69	10.82	33.46	4.73	1.85	50	11.52	33.28	5.23	1.61	25.36	263.2	0.170	
91	10.19	33.58	4.16	2.30	75	10.64	33.49	4.55	2.02	25.68	233.1	0.232	
141	9.10	33.80	-	-	100	9.92	33.63	3.97	2.33	25.92	211.5	0.288	
186	8.66	33.96	2.62	2.51	150	8.98	33.84	3.15	2.45	26.23	182.1	0.387	
232	7.92	34.07	1.97	2.80	200	8.43	34.00	2.41	2.58	26.45	162.9	0.472	
277	7.59	34.13	1.42	2.96	250	7.75	34.10	1.70	2.88	26.63	146.4	0.550	
328	7.41	34.20	0.97	3.24	300	7.49	34.17	1.21	3.12	26.72	138.3	0.621	
376	7.19	34.20	0.80	3.24	400	7.01	34.21	0.70	3.24	26.82	130.2	0.755	
426	6.74	34.22	0.57	3.24									
476	6.57	34.22	0.59	3.36									
CREST; September 18, 1950; 2209 GCT; 33°11'N, 118°23'W; sounding, 663 fm; wind, 140°, force 2; weather, partly cloudy; sea, moderate; wire angle, 15°.													90.37
0	18.78	-	5.48	0.54	0	18.78	(33.55)	5.48	0.54	(23.99)	(392.9)	(0.000)	
10	18.42	33.55	5.51	0.57	10	18.42	33.55	5.51	0.57	24.09	383.7	0.039	
24	16.86	33.49	5.69	0.51	20	17.75	33.54	5.68	0.52	24.24	370.1	0.077	
48	12.58	33.42	5.43	1.11	30	15.10	33.45	5.67	0.52	24.78	318.8	0.111	
72	11.22	33.51	4.76	1.38	50	12.44	33.42	5.36	1.16	25.30	269.4	0.170	
95	10.26	33.64	3.89	1.76	75	11.05	33.52	4.65	1.43	25.64	237.9	0.233	
148	9.01	33.89	2.73	2.22	100	10.10	33.66	3.71	1.83	25.91	212.2	0.289	
194	8.41	34.00	2.31	2.37	150	8.97	33.90	2.70	2.23	26.28	177.6	0.387	
289	7.74	34.16	1.33	2.55	200	8.36	34.01	2.25	2.38	26.46	161.1	0.471	
387	7.04	34.25	0.66	3.18	250	7.99	34.11	1.75	2.46	26.60	149.1	0.549	
481	6.56	34.29	0.52	3.43	300	7.67	34.17	1.23	2.61	26.69	140.9	9.621	
581	5.93	34.31	0.40	3.45	400	6.97	34.26	0.62	3.22	26.86	125.9	0.755	
677	5.46	34.34	0.26	3.65	500	6.43	34.29	0.51	3.45	26.96	117.8	0.877	
778	4.94	34.40	0.44	3.58	600	5.83	34.31	0.35	3.47	27.05	109.6	0.991	
973	4.28	34.43	0.45	3.55	700	5.35	34.35	0.30	3.66	27.14	101.7	1.096	
					800	4.84	34.41	0.45	3.56	27.25	91.9	1.193	
					1000	(4.20)	(34.43)	(0.45)	(3.55)	(27.33)	(84.5)	(1.369)	

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

90.45 CREST; September 18, 1950; 1746 GCT; 32°57'N, 118°55.5'W; sounding, 940 fm; wind, 140°, force 1; weather, partly cloudy; sea, moderate; wire angle, 13°.

0	17.10	33.51	5.87	0.55	0	17.10	33.51	5.87	0.55	24.37	357.0	0.000
10	15.92	33.51	6.00	0.60	10	15.92	33.51	6.00	0.60	24.64	331.2	0.034
24	12.08	33.26	5.71	-	20	13.00	33.28	5.84	0.68	25.08	289.4	0.065
48	10.28	33.37	5.01	0.99	30	10.92	33.26	5.55	0.77	25.46	253.9	0.093
72	10.05	33.66	3.84	1.79	50	10.26	33.39	4.90	1.03	25.67	233.7	0.141
96	9.48	33.77	3.25	2.01	75	10.00	33.69	3.75	1.86	25.95	207.8	0.197
148	8.62	33.98	2.49	2.31	100	9.37	33.79	3.19	2.05	26.13	190.9	0.246
195	8.15	34.11	1.90	2.76	150	8.59	33.99	2.47	2.33	26.41	165.1	0.335
288	7.56	34.23	1.14	3.19	200	8.12	34.12	1.85	2.80	26.59	149.4	0.414
387	6.99	34.22	0.92	3.20	250	7.79	34.20	1.38	3.07	26.70	139.6	0.486
481	6.56	34.25	0.65	3.27	300	7.48	34.23	1.10	3.20	26.77	133.7	0.555
581	5.94	34.33	0.52	3.41	400	6.92	34.22	0.88	3.21	26.84	128.2	0.685
776	4.98	34.36	0.42	3.39	500	6.45	34.27	0.61	3.29	26.94	119.5	0.809
970	4.19	34.45	0.54	3.43	600	5.84	34.34	0.49	3.42	27.07	107.6	0.923
1171	3.90	34.47	0.68	3.41	700	5.34	34.36	0.43	3.39	27.15	100.8	1.027
					800	4.85	34.37	0.43	3.40	27.21	95.0	1.125
					1000	4.14	34.46	0.56	3.43	27.36	81.5	1.302

90.53 CREST; September 18, 1950; 1327 GCT; 32°39.5'N, 119°29'W; sounding, 720 fm; wind, 140°, force 1; weather, partly cloudy; sea, moderate; wire angle, 3°.

0	16.37	33.40	5.42	0.54	0	16.37	33.40	5.42	0.54	24.45	348.7	0.000
10	15.82	33.35	5.20	0.64	10	15.82	33.35	5.20	0.64	24.54	340.9	0.034
25	15.24	33.33	5.40	0.68	20	15.38	33.33	5.38	0.67	24.62	333.1	0.068
49	12.14	33.42	4.87	1.17	30	15.06	33.33	5.34	0.74	24.69	326.7	0.101
74	9.90	33.38	4.22	1.60	50	11.90	33.42	4.84	1.20	25.40	259.6	0.160
98	9.70	33.57	3.89	1.84	75	9.89	33.38	4.21	1.61	25.73	229.0	0.221
152	8.85	33.89	2.45	2.23	100	9.68	33.60	3.87	1.84	25.93	209.9	0.276
200	8.35	34.04	1.91	2.57	150	8.88	33.88	2.48	2.22	26.28	177.7	0.373
298	7.35	34.09	1.31	2.87	200	8.35	34.04	1.91	2.57	26.49	158.7	0.456
400	6.77	34.22	0.74	3.17	250	7.79	34.08	1.58	2.74	26.60	148.5	0.534
498	6.30	34.20	0.40	3.34	300	7.34	34.09	1.30	2.88	26.68	142.2	0.606
600	5.88	34.31	0.40	3.34u	400	6.77	34.22	0.74	3.17	26.86	126.0	0.740
800	4.59	34.40	0.40	3.51	500	6.29	34.20	0.40	(3.35)	26.91	122.6	0.864
997	4.00	34.54	0.54	3.51	600	5.88	34.31	0.40	(3.44)	27.05	110.2	0.981
1201	3.92	34.42	0.67	3.42	700	5.23	34.37	0.40	(3.48)	27.17	98.7	1.085
					800	4.59	34.40	0.40	3.51	27.27	89.5	1.179
					1000	4.00	34.54	0.55	3.51	27.44	73.9	1.343

90.60 CREST; September 18, 1950; 0934 GCT; 32°30.5'N, 119°54.5'W; sounding, 900 fm; wind, calm; weather, partly cloudy; sea, moderate; wire angle, 0°.

0	17.70	33.26	5.50	0.45	0	17.70	33.26	5.50	0.45	24.03	388.7	0.000
10	17.48	33.26	.5.60	0.62	10	17.48	33.26	5.60	0.62	24.09	383.9	0.039
25	17.36	33.23	5.21	0.59	20	17.40	33.24	5.25	0.60	24.09	383.9	0.077
50	14.40	33.37	6.08	0.66	30	17.34	33.23	5.22	0.59	24.10	383.6	0.115
74	11.78	33.17	5.65	1.01	50	14.40	33.37	6.08	0.66	24.87	310.9	0.185
99	10.30	33.37	4.67	1.51	75	11.78	33.17	5.57	1.01	25.23	276.4	0.258
152	8.77	33.71	3.20	2.17	100	10.27	33.38	4.66	1.52	25.66	235.6	0.322
200	8.12	33.93	2.59	2.59	150	8.85	33.70	3.26	2.13	26.15	190.5	0.429
297	7.18	34.09	1.46	2.98	200	8.12	33.93	2.59	2.59	26.44	163.5	0.517
401	6.36	34.18	0.63	3.35	250	7.61	34.03	1.96	2.82	26.59	149.6	0.595
499	5.82	34.29	0.36	3.41	300	7.14	34.09	1.42	2.99	26.70	139.4	0.668
601	5.48	34.33	0.33	3.48	400	6.38	34.18	0.64	3.35	26.88	123.9	0.800
802	4.78	34.38	0.39	3.53	500	5.81	34.29	0.35	3.41	27.03	109.8	0.916
997	4.05	34.45	0.55	3.53	600	5.49	34.33	0.33	3.48	27.11	103.6	1.023
1201	3.34	-	0.88	3.61r	700	5.15	34.35	0.35	3.52	27.16	99.1	1.125
					800	4.79	34.37	0.38	3.53	27.22	94.2	1.221
					1000	4.03	(34.45)	0.56	(3.53)	(27.37)	(80.9)	(1.396)

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

CREST; September 18, 1950; 0413 GCT; 32°11'N, 120°36'W; sounding, 2,060 fm; wind, calm; weather, partly cloudy; sea, moderate; wire angle, 2°. 90.70

0	18.05	33.24	5.26	0.52	0	18.05	33.24	5.26	0.52	23.93	398.2	0.000
10	17.62	33.28	5.42	0.50	10	17.62	33.28	5.42	0.50	24.07	385.9	0.039
25	17.38	33.22	-	0.52	20	17.43	33.26	5.48	0.50	24.10	383.1	0.078
50	13.54	33.22	5.43	0.64	30	17.28	33.22	5.50	0.53	24.10	382.9	0.116
75	11.07	33.30	5.07	1.19	50	13.54	33.22	5.43	0.64	24.93	305.0	0.185
99	9.80	33.46	4.21	1.63	75	11.07	33.30	5.07	1.19	25.46	254.4	0.255
153	8.69	33.84	2.89	2.12	100	9.77	33.47	4.17	1.63	25.82	220.9	0.314
202	8.08	33.98	2.32	2.49	150	8.75	33.82	2.95	2.10	26.25	180.1	0.415
299	7.18	34.04	1.37	3.05	200	8.11	33.97	2.36	2.46	26.47	160.4	0.499
402	6.63	34.18	0.72	3.25	250	7.59	34.03	1.81	2.81	26.59	149.3	0.576
498	6.14	34.27	0.41	3.45	300	7.18	34.04	1.37	3.05	26.66	143.6	0.650
600	5.65	34.23	0.34	3.58	400	6.64	34.18	0.73	3.25	26.84	127.3	0.786
800	4.74	34.39	0.39	3.65	500	6.13	34.27	0.41	3.45	26.98	115.3	0.907
997	4.07	34.38	0.67	3.57	600	5.65	34.23	0.34	3.58	27.01	113.2	1.021
1200	3.47	34.45	0.79	3.46	700	5.18	34.30	0.35	3.63	27.12	103.2	1.130
					800	4.74	34.39	0.39	3.65	27.24	92.3	1.227
					1000	4.07	34.38	0.67	3.57	27.31	86.6	1.406

CREST; September 17, 1950; 2352, 2205 GCT; 31°48.5'N, 121°18'W; sounding, 2,200 fm; wind, calm; weather, partly cloudy; sea, slight; wire angle, 2°, 0°. 90.80

0	19.06	33.50	5.27	0.47	0	19.06	33.50	5.27	0.47	23.88	403.9	0.000
10	18.49	33.46	5.25	0.49	10	18.49	33.46	5.25	0.49	23.99	393.1	0.040
25	18.22	33.44	5.42	0.43	20	18.30	33.44	5.34	0.45	24.03	390.1	0.079
50	14.87	33.12	5.81	0.53	30	18.15	33.43	5.50	0.43	24.05	387.7	0.118
76	13.01	33.24	5.76	0.76	50	14.87	33.12	5.81	0.53	24.57	338.7	0.190
99	11.22	33.40	4.68	0.79	75	13.05	33.22	5.76	0.76	25.03	296.1	0.270
152	8.95	-	3.35	1.29	100	11.21	33.40	4.62	0.79	25.51	250.4	0.338
201	8.23	33.93	2.53	2.21	150	9.00	33.67	3.38	1.26	26.10	195.0	0.449
296	7.26	34.09	1.39	2.83	200	8.24	33.93	2.54	2.20	26.42	165.1	0.540
398	6.44	34.12	0.74	3.18	250	7.73	34.05	1.88	2.63	26.59	149.8	0.618
495	5.92	34.22	0.36	3.30	300	7.22	34.09	1.36	2.85	26.69	140.5	0.691
597	5.44	34.34	0.33	3.42	400	6.42	34.12	0.72	3.19	26.83	128.9	0.825
797	4.58	34.40	0.42	3.46	500	5.90	34.23	0.35	3.30	26.98	115.2	0.947
993	3.94	34.51	0.58	3.39	600	5.42	34.34	0.34	3.42	27.12	102.1	1.057
1198	3.38	34.51	0.88	3.38	700	4.91	34.34	0.39	3.46	27.18	96.9	1.155
					800	4.57	34.40	0.45	3.46	27.27	89.3	1.249
638	5.18	34.33	0.40r	3.76r	1000	3.91	34.51	0.60	3.39	27.43	75.0	1.413
851	4.36	34.46	0.75r	3.66r	1200	3.36	34.51	0.90	3.38	27.48	70.2	1.558
1066	3.71	34.49	0.97r	3.64r	1500	2.78	34.51	1.33	3.34	27.54	65.6	1.762
1279	3.18	34.46	1.26r	3.52r	2000	2.10	34.61	2.10	3.12	27.67	52.7	2.058
1601	2.63	34.54	1.46	3.33								
1870	2.26	34.60	1.92	3.21								
2145	1.98	34.60	2.25	3.00								
2420	1.85	34.63	-	-								

S10

CCOFI 5009

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

90.90 CREST; September 17, 1950; 1552 GCT; 31°25'N, 122°01'W; sounding, 2,230 fm; wind, calm; weather, partly cloudy; sea, moderate; wire angle, 0°.

0	18.58	33.14	5.05	0.60	0	18.58	33.14	5.05	0.60	23.73	417.9	0.000
10	18.25	33.15	5.04	0.66	10	18.25	33.15	5.04	0.66	23.82	409.7	0.041
25	17.99	33.12	5.09	0.62	20	18.05	33.14	5.05	0.63	23.86	406.1	0.082
50	15.25	33.08	5.34	0.58	30	17.91	33.11	5.14	0.60	23.87	405.4	0.123
74	12.98	32.97	5.10	0.68	50	15.25	33.08	5.34	0.58	24.46	349.5	0.198
98	11.16	32.89	5.52	1.00	75	12.98	32.97	5.10	0.69	24.85	313.1	0.281
151	9.32	33.33	4.96	-	100	11.05	32.89	5.52	1.02	25.15	284.9	0.356
200	8.46	33.75	4.11	1.82	150	9.34	33.33	4.95	1.45	25.78	225.4	0.483
296	7.38	33.96	2.80	2.81	200	8.46	33.75	4.11	1.82	26.25	181.7	0.586
399	6.10	-	1.46	3.13	250	7.88	33.90	3.37	2.30	26.45	163.1	0.671
495	5.44	34.14	0.75	3.51	300	7.32	33.96	2.74	2.84	26.58	151.5	0.750
597	4.73	34.13	0.51	3.59	400	6.08	34.05	1.45	3.14	26.81	129.6	0.890
797	4.14	34.34	0.52	3.70	500	5.40	34.14	0.73	3.52	26.97	115.5	1.013
993	3.72	34.37	0.57	3.54	600	4.70	34.13	0.51	3.59	27.04	108.9	1.125
1196	3.27	34.45	0.82	3.48	700	4.35	34.23	0.51	3.67	27.16	98.3	1.229
					800	4.14	34.34	0.53	3.70	27.27	88.6	1.322
					1000	3.71	34.37	0.57	3.54	27.34	83.0	1.494

90.100 CREST; September 17, 1950; 1045 GCT; 31°04.5'N, 122°40'W; sounding, 2,200 fm; wind, 360°, force 1; weather, partly cloudy; sea, slight; wire angle, 2°.

0	19.39	33.42	5.12	0.55	0	19.39	33.42	5.12	0.55	23.73	417.3	0.000
10	19.40	33.39	5.10	0.54	10	19.40	33.39	5.10	0.54	23.72	419.3	0.042
25	19.21	33.46	5.25	0.55	20	19.30	33.41	5.20	0.54	23.75	416.2	0.084
50	17.59	33.64	5.63	0.47	30	19.00	33.54	5.37	0.55	23.93	399.9	0.124
74	16.34	33.68	5.45	0.46	50	17.59	33.64	5.63	0.47	24.35	360.0	0.200
98	15.53	33.73	5.42	0.46	75	16.26	33.68	5.45	0.46	24.70	327.4	0.286
151	12.18	33.68	5.02	0.92	100	15.43	33.73	5.41	0.47	24.92	307.3	0.366
200	9.62	33.73	4.03	1.66	150	12.25	33.68	5.04	0.91	25.54	249.2	0.505
296	7.64	33.98	2.98	2.37	200	9.62	33.73	4.03	1.66	26.04	201.4	0.617
399	6.41	34.11	1.38	3.02	250	8.39	33.86	3.40	2.06	26.34	173.5	0.711
497	5.74	34.22	0.73	3.26	300	7.56	33.99	2.94	2.40	26.57	152.7	0.793
600	5.14	34.27	0.42	3.31	400	6.40	34.11	1.35	3.02	26.82	129.3	0.934
799	4.38	34.47	0.56	3.51	500	5.70	34.22	0.73	3.27	27.00	113.4	1.055
996	3.89	34.51	0.60	3.48	600	5.14	34.27	0.42	3.31	27.10	103.8	1.164
1199	3.37	34.42	0.83	3.44	700	4.70	34.37	0.46	3.41	27.23	92.1	1.262
					800	4.37	34.47	0.57	3.51	27.35	81.7	1.348
					1000	3.88	34.51	0.60	3.48	27.43	74.7	1.505

90.110 CREST; September 17, 1950; 0503, 0525 GCT; 30°44.5'N, 123°20'W; sounding, 2,130 fm: wind, 320°, force 2; weather, partly cloudy; sea, slight; wire angle, 4°, 4°.

0	19.38	33.46	4.97	0.62	0	19.38	33.46	4.97	0.62	23.77	413.9	0.000
10	19.38	33.48	4.87	0.61	10	19.38	33.48	4.87	0.61	23.79	412.5	0.041
25	19.18	33.45	4.90	0.62	20	19.26	33.46	4.88	0.62	23.80	411.7	0.083
50	17.58	33.64	5.18	0.58	30	19.11	33.46	4.95	0.62	23.84	408.3	0.124
74	16.60	33.71	5.24	0.58	50	17.58	33.64	5.18	0.58	24.35	359.8	0.200
98	15.96	33.61	5.62	0.58	75	16.56	33.71	5.24	0.58	24.65	332.5	0.287
151	12.69	33.71	4.92	0.94	100	15.92	33.61	5.63	0.59	24.72	326.5	0.369
202	9.76	33.68	4.19	1.77	150	12.85	33.71	4.96	0.92	25.44	258.2	0.515
					200	9.85	33.68	4.24	1.74	25.97	208.7	0.632
298	7.82	33.66	2.72	2.49	250	8.61	33.67	3.40	2.16	26.16	190.9	0.731
400	6.71	33.99	1.59	3.23	300	7.80	33.66	2.69	2.51	26.27	180.5	0.825
497	5.96	34.04	0.79	3.59	400	6.71	33.99	1.59	3.23	26.68	142.4	0.986
600	5.29	34.16	0.58	3.68	500	5.94	34.04	0.78	3.59	26.82	129.8	1.122
799	4.52	34.38	0.47	4.42r	600	5.29	34.16	0.58	3.68	27.00	114.0	1.244
994	3.94	34.42	0.56	3.74	700	4.85	34.28	0.50	3.71	27.14	100.6	1.351
1199	3.44	34.52	0.81	3.62	800	4.52	34.38	0.46	3.73	27.26	90.2	1.447
					1000	3.94	34.42	0.56	3.74	27.35	82.0	1.619

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

CREST; September 16, 1950; 2322 GCT; 30°23.5'N, 124°01'W; sounding, 2,300 fm; wind, 360°, force 3; weather, cloudy; sea, slight; wire angle, 8°. 90.120

0	19.96	33.49	5.15	0.53	0	19.96	33.49	5.15	0.53	23.64	426.0	0.000
10	19.90	33.51	4.74	0.48	10	19.90	33.51	4.74	0.48	23.67	423.4	0.042
24	19.66	33.49	5.12	0.45	20	19.74	33.51	4.84	0.46	23.72	419.8	0.085
49	16.45	33.39	5.52	0.44	30	19.60	33.45	5.23	0.44	23.71	421.0	0.127
74	15.42	33.40	5.73	0.53	50	16.40	33.39	5.54	0.44	24.44	351.5	0.204
98	14.18	33.44	5.42	1.29	75	15.40	33.40	5.72	0.64	24.67	330.0	0.289
151	11.78	33.55	4.65	1.74	100	14.05	33.44	5.39	1.32	24.99	300.1	0.368
198	9.22	33.80	3.83	2.56	150	11.80	33.55	4.65	1.72	25.52	250.5	0.505
293	7.42	34.09	2.52	3.18	200	9.10	33.82	3.79	2.59	26.20	186.4	0.614
394	6.57	34.20	1.05	3.34	250	7.92	34.03	3.07	2.99	26.55	154.1	0.700
491	5.91	34.29	0.60	3.41	300	7.35	34.10	2.43	3.19	26.68	141.5	0.774
592	5.49	34.52r	0.36	3.56	400	6.54	34.21	1.00	3.35	26.88	123.8	0.906
789	4.54	34.40	0.37	3.53	500	5.87	34.29	0.57	3.42	27.03	110.4	1.023
985	3.97	34.54	0.65	3.44	600	5.45	34.34	0.37	3.56	27.12	102.5	1.130
1190	3.41	34.56	0.85	3.39	700	4.94	34.37	0.37	3.56	27.20	95.0	1.228
					800	4.50	34.40	0.37	3.52	27.28	88.4	1.320
					1000	3.94	34.54	0.67	3.44	27.45	73.2	1.482

CREST; September 16, 1950; 1827 GCT; 30°02'N, 124°32.5'W; sounding, 2,300 fm; wind, 320°, force 2; weather, rain; sea, slight; wire angle, 9°. 90.130

0	20.08	33.53	5.01	0.45	0	20.08	33.53	5.01	0.45	23.64	426.6	0.000
10	19.99	33.58	5.16	0.47	10	19.99	33.58	5.16	0.47	23.70	420.8	0.042
25	19.79	33.49	4.98	0.44	20	19.86	33.57	4.98	0.45	23.73	418.4	0.084
49	15.58	33.31	5.86	0.40	30	19.70	33.35	5.12	0.43	23.60	430.7	0.127
73	13.31	33.31	6.09	0.47	50	15.50	33.31	5.88	0.40	24.58	338.0	0.204
98	11.66	33.37	5.56	0.92	75	13.10	33.31	6.08	0.49	25.09	290.4	0.282
151	9.87	33.64	3.44	1.51	100	11.55	33.39	5.37	0.97	25.44	256.7	0.351
198	–	33.84	2.86	1.93	150	9.89	33.63	3.48	1.50	25.92	212.0	0.467
295	7.49	34.07	1.79	2.51	200	8.90	33.84	2.83	1.95	26.25	181.8	0.567
397	6.33	34.22	0.91	2.91	250	8.17	33.98	2.27	2.27	26.47	161.4	0.652
494	5.87	34.22	–	3.15	300	7.39	34.08	1.73	2.53	26.66	143.6	0.728
595	5.35	34.34	0.37	3.23	400	6.31	34.22	0.89	2.92	26.92	120.0	0.860
796	4.37	34.43	0.42	3.23	500	5.85	34.22	0.54	3.15	26.98	115.3	0.977
994	3.79	34.52	0.56	3.21	600	5.32	34.34	0.37	3.23	27.14	100.9	1.085
1198	3.31	34.54	0.73	3.30r	700	4.78	34.40	0.38	3.22	27.25	90.8	1.181
					800	4.36	34.43	0.42	3.23	27.32	84.5	1.269
					1000	3.78	34.52	0.55	(3.21)	27.45	72.7	1.427

CREST; September 16, 1950; 1037 GCT; 29°31.5'N, 125°40'W; sounding, 2,450 fm; wind, 320°, force 5; weather, partly cloudy; sea, slight; wire angle, 1°. 90.145

0	20.08	33.48	5.12	0.50	0	20.08	33.48	5.12	0.50	23.60	430.0	0.000
10	19.72	33.46	5.26	0.50	10	19.72	33.46	5.26	0.50	23.68	422.8	0.043
25	19.57	33.44	5.30	0.41	20	19.61	33.45	5.29	0.42	23.70	420.9	0.085
50	16.38	33.28	5.89	0.47	30	19.45	33.42	5.31	0.42	23.72	419.5	0.127
74	14.86	33.26	6.02	0.46	50	16.38	33.28	5.89	0.47	24.36	358.7	0.205
98	12.74	33.22	5.91	0.58	75	14.85	33.26	6.02	0.46	24.68	328.8	0.291
152	10.27	33.57	4.62	1.32	100	12.52	33.22	5.88	0.61	25.13	286.7	0.368
201	8.80	33.87	3.61	1.80	150	10.37	33.55	4.70	1.28	25.78	225.8	0.495
299	7.42	34.05	2.28	2.47	200	8.84	33.87	3.64	1.80	26.28	178.7	0.597
400	6.16	34.13	1.23	2.86	250	8.01	33.99	2.89	2.16	26.50	158.3	0.681
498	5.76	34.22	0.59	3.19	300	7.41	34.05	2.27	2.47	26.63	146.1	0.757
600	5.27	34.31	0.37	3.34	400	6.16	34.13	1.23	2.86	26.87	124.7	0.892
801	4.38	34.40	0.43	–	500	5.74	34.22	0.58	3.19	26.99	114.2	1.012
999	3.79	34.47	0.70	3.35	600	5.27	34.31	0.37	3.34	27.12	102.5	1.120
1200	3.33	34.52	0.92	3.23	700	4.79	34.36	0.36	3.37	27.21	93.9	1.218
					800	4.39	34.40	0.42	3.38	27.29	87.1	1.309
					1000	3.79	34.47	0.70	3.35	27.41	76.6	1.472

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OBSERVED					INTERPOLATED					COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m

90.160 CREST; September 16, 1950; 0411 GCT; 29°07'N, 126°30'W; sounding, 2,410 fm; wind, 320°, force 3; weather, cloudy; sea, slight; wire angle, 10°.

0	20.35	33.57	5.27	0.46	0	20.35	33.57	5.27	0.46	23.60	430.0	0.000
10	20.26	33.55	5.28	0.41	10	20.26	33.55	5.28	0.41	23.61	429.3	0.043
25	19.94	33.58	5.28	0.47	20	20.05	33.56	5.28	0.45	23.67	423.9	0.086
49	17.65	33.86	5.62	0.42	30	19.37	33.59	5.33	0.47	23.87	405.2	0.127
73	18.13	34.29	5.59	0.35	50	17.65	33.90	5.62	0.42	24.54	342.5	0.202
98	17.44	34.29	5.48	0.36	75	18.12	34.29	5.58	0.35	24.72	325.9	0.285
149	14.43	34.00	5.10	0.61	100	17.33	34.29	5.48	0.36	24.91	308.4	0.365
198	10.98	33.77	4.44	1.28	150	14.43	33.99	5.09	0.62	25.34	268.8	0.509
292	7.96	33.98	3.34	2.22	200	10.83	33.77	4.40	1.31	25.87	218.4	0.630
391	6.49	34.05	1.95	2.91	250	8.93	33.87	3.82	1.85	26.27	181.0	0.730
486	5.59	34.14	0.99	3.35	300	7.80	33.99	3.22	2.28	26.53	156.1	0.815
586	4.96	34.18	0.48	3.49	400	6.39	34.05	1.85	2.97	26.77	133.6	0.960
784	4.40	34.40	0.49	3.49	500	5.48	34.15	0.88	3.39	26.97	115.8	1.084
981	3.90	34.47	0.67	3.48	600	4.91	34.19	0.48	3.49	27.07	106.9	1.196
1181	3.46	34.52	0.97	3.42	700	4.59	34.29	0.49	3.48	27.18	96.7	1.297
					800	4.35	34.41	0.49	3.48	27.30	85.8	1.389
					1000	3.85	34.47	0.72	3.48	27.40	77.3	1.552

90.175 CREST; September 15, 1950; 2005, 1827 GCT; 28°34.5'N, 127°38'W; sounding, 2,480 fm; wind, 020°, force 3; weather, partly cloudy; sea, slight; wire angle, 10°, 12°.

0	21.24	34.14	5.02	0.46	0	21.24	34.14	5.02	0.46	23.79	411.7	0.000
10	20.99	34.14	5.11	0.41	10	20.99	34.14	5.11	0.41	23.86	405.6	0.041
25	21.06	34.23	5.01	0.39	20	21.06	34.17	5.04	0.40	23.87	405.4	0.081
49	19.68	34.38	5.28	0.36	30	21.06	34.29	5.02	0.38	23.96	397.0	0.122
73	17.82	34.14	5.10	–	50	19.64	34.38	5.28	0.36	24.40	355.2	0.197
97	16.47	34.04	5.15	–	75	17.60	34.13	5.11	0.37	24.72	325.4	0.282
149	14.01	33.89	4.89	0.38	100	16.38	34.03	5.14	0.37	24.93	305.9	0.361
198	10.95	33.77	4.88	1.14	150	13.90	33.89	4.89	0.38	25.37	265.5	0.503
292	8.46	34.00	3.84	2.02	200	10.87	33.77	4.87	1.16	25.86	219.1	0.624
392	6.66	34.02	2.42	2.71	250	9.35	33.91	4.45	1.72	26.23	184.6	0.726
487	5.54	34.16	1.26	3.36	300	8.31	34.00	3.73	2.08	26.46	162.9	0.813
589	5.00	34.22	0.61	3.53	400	6.55	34.02	2.30	2.71	26.73	138.0	0.963
788	4.29	34.38	–	–	500	5.44	34.17	1.15	3.40	26.99	113.8	1.088
984	3.88	34.49	0.87r	–	600	4.96	34.23	(0.58)	(3.53)	27.09	104.6	1.198
1187	3.41	34.52	1.00	3.47	700	4.59	34.32	(0.55)	(3.52)	27.20	94.5	1.297
					800	4.25	34.39	(0.61)	(3.50)	27.30	86.2	1.388
632	4.85	34.27	0.52	3.68r	1000	3.85	34.49	(0.81)	(3.48)	27.42	75.8	1.550
1055	3.72	34.49	0.82	4.12r	1200	3.38	34.53	1.01	3.46	27.50	68.9	1.695
1267	3.25	34.56	1.05	3.61r	1500	2.81	34.56	1.30	3.42	27.57	61.2	1.890
1587	2.64	34.56	1.39	3.59r	2000	2.11	34.63	1.86	3.34	27.69	51.3	2.171
1859	2.26	34.63	1.69	3.36								
2132	2.00	34.63	2.02	3.30								
2405	1.81	34.63	2.33	3.16								

90.190 CREST; September 15, 1950; 1035 GCT; 28°07.5'N, 128°44.5'W; sounding, 2,400 fm; wind, 040°, force 1; weather, partly cloudy; sea, slight; wire angle, 6°.

0	21.10	34.27	5.12	0.39	0	21.10	34.27	5.12	0.39	23.93	398.4	0.000
10	21.10	34.23	5.10	0.39	10	21.10	34.23	5.10	0.39	23.90	401.7	0.040
25	20.85	34.23	5.14	0.33	20	21.02	34.23	5.12	0.35	23.92	400.0	0.080
49	19.16	34.23	5.45	0.27	30	20.65	34.23	5.20	0.32	24.02	390.8	0.120
73	17.89	34.27	5.55	0.26	50	19.10	34.23	5.46	0.27	24.43	352.9	0.194
98	17.73	34.40	5.46	0.28	75	17.87	34.28	5.55	0.26	24.77	320.8	0.278
151	15.94	34.33	4.86	0.42	100	17.70	34.40	5.43	0.29	24.91	308.9	0.357
199	11.92	33.91	4.64	0.99	150	16.05	34.33	4.88	0.41	25.24	278.3	0.504
295	8.37	34.04	3.17	2.23	200	11.90	33.91	4.63	1.05	25.78	227.1	0.630
395	6.92	34.09	1.78	2.25r	250	9.47	33.97	3.91	1.91	26.26	182.1	0.732
491	5.92	34.14	1.10	2.92	300	8.25	34.04	3.08	2.25	26.50	159.0	0.818
591	5.26	34.25	0.67	3.35	400	6.86	34.09	1.73	2.63	26.74	137.0	0.965
790	4.48	34.40	0.49	3.59	500	5.85	34.15	1.06	2.95	26.92	120.5	1.094
985	3.98	34.47	0.83	3.53	600	5.21	34.26	0.64	3.37	27.09	105.4	1.207
1190	3.56	34.51	0.84	3.36	700	4.78	34.35	0.52	3.53	27.21	94.5	1.307
					800	4.44	34.40	0.50	3.58	27.28	87.7	1.398
					1000	3.95	34.47	0.82	3.52	27.39	78.5	1.565

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

CREST; September 15, 1950; 0322 GCT; 27°33.5'N, 129°35.5'W; sounding, 2,500 fm; wind, 040°, force 3; weather, partly cloudy; sea, slight; wire angle, 7°. 90.205

0	21.54	34.40	5.01	0.36	0	21.54	34.40	5.01	0.36	23.91	400.5	0.000
10	21.38	34.48	4.94	0.33	10	21.38	34.48	4.94	0.34	24.02	390.6	0.040
25	21.31	34.40	4.94	0.34	20	21.32	34.45	4.95	0.34	24.01	391.8	0.079
49	19.47	34.33	5.37	0.32	30	21.24	34.37	5.00	0.34	23.97	395.9	0.118
73	18.68	34.34	5.44	0.31	50	19.47	34.33	5.39	0.32	24.41	354.7	0.193
97	18.30	34.45	5.32	0.30	75	18.67	34.35	5.43	0.31	24.63	334.6	0.279
151	15.74	34.33	4.88	0.47	100	18.25	34.45	5.30	0.30	24.81	318.2	0.361
197	12.92	33.80	4.08	1.09	150	15.80	34.34	4.88	0.47	25.30	272.2	0.508
294	8.77	34.07	-	2.14	200	12.75	33.80	(4.03)	1.13	25.53	250.9	0.639
395	7.16	34.13	1.45	2.78	250	10.25	33.97	(3.24)	1.70	26.13	194.9	0.750
492	6.45	34.23	0.65	3.16	300	8.62	34.08	(2.52)	2.19	26.48	161.6	0.840
594	5.69	34.34	0.40	3.31	400	7.12	34.14	1.39	2.80	26.75	136.9	0.989
793	4.80	34.47	0.40	3.41	500	6.38	34.24	0.63	3.17	26.92	120.8	1.118
992	4.12	34.45	0.70	3.39	600	5.66	34.35	0.40	3.32	27.10	104.5	1.230
1191	3.62	34.54	0.85	3.36	700	5.16	34.43	0.40	3.38	27.23	93.3	1.329
					800	4.78	34.47	0.40	3.41	27.30	86.7	1.419
					1000	4.10	34.45	0.73	3.38	27.36	81.8	1.587

CREST; September 14, 1950; 2011 GCT; 27°04'N, 130°35'W; sounding, 2,500 fm; wind, 040°, force 2; weather, partly cloudy; sea, slight; wire angle, 4°. 90.220

0	21.71	34.56	4.70	0.35	0	21.71	34.56	4.70	0.35	23.98	393.4	0.000
10	21.62	34.52	4.57	0.39	10	21.62	34.52	4.57	0.39	23.98	394.3	0.039
25	21.38	34.60	4.53	0.40	20	21.47	34.59	4.53	0.40	24.07	385.6	0.078
49	20.03	34.52	4.90	0.42	30	21.18	34.59	4.54	0.41	24.15	378.4	0.117
74	19.00	34.51	4.95	0.44	50	19.98	34.52	4.92	0.42	24.42	353.6	0.190
98	18.21	34.45	5.16	0.37	75	18.95	34.51	4.97	0.44	24.68	329.8	0.275
151	14.91	34.05	4.79	0.70	100	18.10	34.44	5.17	0.37	24.84	315.4	0.356
202	10.65	33.78	4.01	1.58	150	15.00	34.06	4.79	0.69	25.27	275.5	0.503
296	8.24	34.07	3.10	2.37	200	10.75	33.78	4.05	1.56	25.89	216.3	0.626
397	6.72	34.07	1.94	3.04	250	9.16	33.95	3.51	2.06	26.29	178.7	0.726
495	5.82	34.16	0.99	3.40	300	8.15	34.07	3.06	2.40	26.54	155.3	0.809
597	5.21	34.29	0.52	3.51	400	6.68	34.07	1.90	3.06	26.75	136.0	0.955
797	4.46	34.42	0.53	3.65	500	5.80	34.16	0.95	3.40	26.94	119.1	1.082
995	3.89	34.49	0.78	3.56	600	5.19	34.29	0.53	3.51	27.11	103.0	1.193
1201	3.49	34.60	0.97	3.41	700	4.78	34.36	0.52	3.60	27.21	93.8	1.291
					800	4.44	34.42	0.53	3.65	27.30	86.2	1.382
					1000	3.88	34.49	0.79	3.56	27.41	76.2	1.544

CREST; September 14, 1950; 1332 GCT; 26°35'N, 131°27.5'W; sounding, 2,580 fm; wind, 040°, force 4; weather, cloudy; sea, moderate; wire angle, 17°. 90.235

0	21.71	34.60	5.10	0.35	0	21.71	34.60	5.10	0.35	24.02	390.5	0.000
10	21.72	34.60	5.01	0.36	10	21.72	34.60	5.01	0.36	24.01	391.1	0.039
24	20.88	34.56	5.15	0.35	20	21.30	34.56	5.10	0.36	24.10	383.4	0.078
47	19.78	34.61	5.27	0.29	30	20.50	34.56	5.18	0.33	24.31	363.1	0.115
71	18.88	34.49	5.46	0.30	50	19.67	34.61	5.29	0.29	24.57	339.3	0.185
94	17.76	34.34	5.43	0.31	75	18.75	34.38	5.47	0.31	24.63	334.4	0.270
144	16.09	34.34	5.06	0.51	100	17.53	34.34	5.39	0.33	24.90	309.3	0.350
189	12.13	33.86	4.47	0.97	150	15.78	34.33	4.99	0.55	25.30	272.5	0.495
279	8.88	34.04	2.96	2.13	200	11.36	33.87	4.25	1.13	25.85	220.3	0.618
373	7.23	34.07	2.15	2.63	250	9.52	33.99	3.37	1.87	26.26	181.5	0.720
465	5.88	34.11	1.37	2.98	300	8.50	34.05	2.73	2.27	26.47	162.0	0.805
560	5.13	34.23	0.74	3.20	400	6.75	34.08	1.93	2.74	26.75	136.3	0.954
750	4.46	34.42	0.80r	3.41	500	5.55	34.15	1.11	3.08	26.96	116.7	1.081
942	4.06	34.51	0.54	3.41	600	4.93	34.28	(0.65)	3.26	27.13	100.5	1.189
1143	3.54	34.52	0.95	3.35	700	4.58	34.38	(0.56)	3.38	27.25	89.9	1.284
					800	4.36	34.46	(0.55)	3.41	27.34	82.3	1.371
					1000	3.90	34.52	0.62	3.40	27.44	74.2	1.527

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

90.250 CREST; September 14, 1950; 0559 GCT; 26°05'N, 132°29.5'W; sounding, 2,100 fm; wind, 090°, force 3; weather, cloudy; sea, moderate; wire angle, 13°.

0	22.23	34.92	5.12	0.39	0	22.23	34.92	5.12	0.39	24.11	381.2	0.000
10	22.24	34.94	5.03	0.39	10	22.24	34.94	5.03	0.39	24.12	380.4	0.038
24	22.23	34.90	4.94	0.30	20	22.24	34.91	4.95	0.34	24.10	383.0	0.076
48	21.76	35.08	4.89	0.31	30	22.19	34.90	4.92	0.30	24.11	382.7	0.115
72	20.12	34.90	5.33	0.35	50	21.71	35.08	4.90	0.31	24.38	357.7	0.189
96	19.27	34.88	5.26	0.41	75	20.00	34.90	5.33	0.35	24.70	327.4	0.274
148	17.41	34.65	4.99	0.75	100	19.13	34.87	5.23	0.43	24.91	308.9	0.354
195	14.01	34.14	4.73	1.83	150	17.30	34.62	4.97	0.78	25.17	285.3	0.502
289	9.15	33.96	4.00	2.76	200	13.69	34.11	4.70	1.92	25.58	246.5	0.635
389	7.10	34.05	2.37	-	250	10.57	33.99	4.34	2.47	26.09	198.9	0.746
483	6.09	34.16	1.08	3.33	300	8.87	33.96	3.88	2.80	26.35	174.4	0.840
583	5.52	34.27	0.53	3.54	400	6.95	34.06	2.14	3.11	26.71	140.5	0.997
779	4.66	34.42	0.52	3.53	500	5.97	34.18	0.95	3.37	26.93	119.8	1.127
974	4.08	34.45	0.72	3.54	600	5.44	34.29	0.53	3.54	27.08	106.1	1.240
1177	3.55	34.56	0.94	3.44	700	4.95	34.37	0.53	3.54	27.20	95.2	1.341
					800	4.59	34.43	0.53	3.54	27.29	87.3	1.432
					1000	4.02	34.46	0.74	3.53	27.38	80.1	1.599

90.265 CREST; September 13, 1950; 2157 GCT; 26°36.5'N, 133°27.5'W; sounding, 2,650 fm; wind, 090°, force 4; weather, cloudy; sea, rough; wire angle, 5°.

0	22.58	34.94	4.91	0.47	0	22.58	34.94	4.91	0.47	24.03	389.2	0.000
10	22.58	34.94	4.92	0.46	10	22.58	34.94	4.92	0.46	24.03	389.6	0.039
25	22.50	34.92	4.90	0.60	20	22.50	34.93	4.90	0.60	24.04	388.5	0.078
54	21.81	34.90	5.10	0.51	30	22.42	34.91	4.92	0.59	24.05	388.2	0.117
78	20.06	34.78	5.06	0.48	50	21.96	34.90	5.08	0.52	24.17	377.3	0.193
109	18.48	34.61	4.89	0.50	75	20.23	34.81	5.07	0.48	24.58	339.8	0.283
161	16.27	34.43	4.57	0.78	100	18.89	34.65	4.93	0.48	24.80	319.0	0.365
215	12.94	34.07	4.40	1.07	150	16.80	34.48	4.64	0.71	25.18	284.1	0.516
321	8.66	34.04	3.50	2.16	200	13.79	34.10	4.45	0.99	25.55	249.2	0.649
432	6.68	34.07	1.96	2.94	250	11.36	34.04	4.14	1.42	25.98	209.0	0.764
539	5.61	34.23	0.72	3.42	300	9.30	34.04	3.68	1.94	26.34	175.2	0.860
647	4.99	34.31	0.46	3.51	400	7.12	34.05	2.40	2.75	26.68	143.6	1.019
856	4.36	34.45	0.61	3.55	500	5.96	34.17	1.14	3.30	26.92	120.4	1.151
1066	3.78	34.51	0.86	3.64	600	5.22	34.28	0.50	3.48	27.10	104.1	1.263
1270	3.35	34.54	1.07	3.56	700	4.79	34.34	0.46	3.53	27.20	95.4	1.363
					800	4.50	34.41	0.54	3.54	27.29	87.7	1.455
					1000	3.95	34.50	0.78	3.61	27.42	76.3	1.618

90.280 CREST; September 13, 1950; 1435, 1227 GCT; 25°06'N, 134°32.5'W; sounding, 2,200 fm; wind, 070°, 090°, force 3; weather, partly cloudy; sea, rough; wire angle, 14°, 19°.

0	22.30	34.99	4.98	0.16	0	22.30	34.99	4.98	0.16	24.15	378.0	0.000
10	22.35	34.97	4.71	0.21	10	22.35	34.97	4.71	0.21	24.12	381.2	0.038
24	22.50	35.11	5.06	0.20	20	22.44	35.08	4.95	0.21	24.17	376.1	0.076
53	22.37	34.70	5.30	0.19	30	22.51	35.10	5.16	0.20	24.17	376.9	0.113
77	19.46	34.91	5.08	0.14	50	22.40	34.70	5.30	0.19	23.90	403.5	0.192
106	18.87	34.81	5.25	0.17	75	19.42	34.91	5.07	0.14	24.86	312.3	0.281
158	18.39	34.88	5.10	0.24	100	19.04	34.82	5.25	0.16	24.89	310.3	0.359
210	14.82	34.29	4.78	0.28	150	18.47	34.88	5.14	0.24	25.08	293.9	0.510
313	8.86	34.00	3.98	1.55	200	15.65	34.45	4.85	0.26	25.42	262.4	0.649
422	6.64	34.05	2.18	2.56	250	11.72	34.08	4.48	0.58	25.95	212.5	0.767
526	5.38	34.16	1.27	3.04	300	9.29	34.00	4.08	1.31	26.31	178.0	0.866
630	4.85	34.29	0.52	3.33	400	6.94	34.03	2.44	2.41	26.68	142.6	1.025
836	4.33	34.45	0.75	3.42	500	5.63	34.13	1.52	2.95	26.93	119.2	1.156
1048	3.81	34.51	0.93	3.41	600	4.95	34.25	0.59	3.26	27.11	103.0	1.267
1252	3.32	34.54	1.06	3.32r	700	4.68	34.37	0.60	3.40	27.23	91.8	1.365
					800	4.44	34.44	0.71	3.42	27.32	84.8	1.453
1323	3.16	34.56	1.13	3.45	1000	3.94	34.50	0.91	3.41	27.42	76.1	1.614
1595	2.61	34.63	1.42	3.36	1200	3.42	34.53	1.03	3.43	27.49	69.4	1.760
1869	2.30	34.62	1.77	3.42	1500	2.79	34.61	1.32	3.39	27.62	58.3	1.951
2167	1.95	34.65	2.11	3.25	2000	2.16	34.63	1.94	3.37	27.68	51.8	2.246
2515	1.73	34.65	2.45	3.00	2500	1.74	34.65	2.41	3.01	27.73	47.2	2.425

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

PAOLINA-T; September 22, 1950; 0427 GCT; 31°40.5'N, 116°46.5'W; sounding, 250 fm; wind, 270°, force 1; weather, partly cloudy; sea, moderate; wire angle, 3°. 100.30

0	17.84	33.57E	4.86	0	17.84	33.57	4.86	24.23	369.5	0.000	
10	14.77	33.54	4.95	10	14.77	33.54	4.95	24.92	304.8	0.034	
25	11.76	33.44	4.37	20	13.10	33.45	4.67	25.19	278.8	0.063	
49	10.30	33.53	3.80	30	11.15	33.44	4.25	25.56	244.5	0.089	
74	9.92	33.78	3.12	50	10.25	33.57	3.80	25.81	220.3	0.136	
99	9.96	33.89	2.47	75	9.92	33.78	3.10	26.03	199.9	0.188	
153	–	34.09	1.70	100	9.96	33.90	2.45	26.12	192.2	0.237	
201	9.36	34.23	1.18	150	9.70	34.07	1.75	26.30	176.4	0.329	
250	8.81	34.27	1.22	200	9.37	34.23	1.18	26.48	160.1	0.414	
299	8.54	34.33	0.98	250	8.81	34.27	1.22	26.60	149.6	0.491	
353	7.99	34.34	0.76	300	8.53	34.33	0.98	26.69	141.8	0.563	

PAOLINA-T; September 21, 1950; 2241 GCT; 31°24'N, 117°20'W; sounding, 1,051 fm; wind, calm; weather, haze; sea, moderate; wire angle, 3°. 100.40

0	20.34	33.61E	4.79	0	20.34	33.61	4.79	23.63	426.8	0.000	
10	19.39	33.64	4.84	10	19.39	33.64	4.84	23.90	401.4	0.041	
25	18.67	33.62	4.82	20	18.72	33.63	4.82	24.07	386.3	0.081	
50	12.92	33.46	5.12	30	18.15	33.57	4.84	24.16	377.5	0.119	
74	10.95	33.55	3.84	50	12.92	33.46	5.12	25.24	275.4	0.184	
99	10.00	33.71	3.18	75	10.87	33.56	3.84	25.70	231.9	0.248	
153	9.03	34.04	2.57	100	9.94	33.72	3.17	25.98	205.2	0.302	
202	8.52	34.13	2.01	150	9.09	34.02	2.60	26.36	170.5	0.396	
305	7.90	34.31	1.21	200	8.55	34.13	2.03	26.53	155.1	0.477	
411	7.10	34.38	0.55	250	8.19	34.21	1.61	26.65	144.7	0.553	
513	6.39	34.38	0.49	300	7.92	34.30	1.25	26.76	134.9	0.622	
826	4.72	34.43	0.32	400	7.19	34.38	0.57	26.93	120.1	0.750	
1025	3.98	34.52	0.74	500	6.49	34.38	0.50	27.02	111.9	0.866	
1231	3.37	34.56	0.78	600	(5.87)	(34.38)	(0.39)	(27.10)	(105.0)	(0.974)	
				700	(5.34)	(34.39)	(0.32)	(27.17)	(98.6)	(1.076)	
				800	(4.84)	(34.42)	(0.32)	(27.26)	(91.2)	(1.171)	
				1000	4.06	34.51	0.67	27.41	76.9	(1.339)	

PAOLINA-T; September 21, 1950; 1735 GCT; 31°07'N, 117°53'W; sounding, 1,100 fm; wind, calm; weather, haze; sea, rough; wire angle, 3°. 100.50

0	18.62	33.44E	4.23	0	18.62	33.44	4.23	23.94	397.3	0.000	
10	18.40	33.39	4.06	10	18.40	33.39	4.06	23.96	395.8	0.040	
25	18.34	33.40	4.40	20	18.35	33.39	4.25	23.98	394.9	0.079	
50	14.18	33.31	4.56	30	18.34	33.40	4.48	23.99	394.3	0.119	
74	12.38	33.33	4.30	50	14.18	33.31	4.56	24.87	310.8	0.189	
99	10.72	33.40	3.96	75	12.25	33.34	4.30	25.27	272.4	0.262	
153	9.05	33.80	3.07	100	10.66	33.41	3.95	25.62	239.9	0.326	
202	8.43	34.07	2.51	150	9.12	33.78	3.13	26.17	188.7	0.434	
301	7.39	34.16	1.29	200	8.45	34.06	2.55	26.49	158.8	0.520	
405	6.50	34.23	0.67	250	7.90	34.14	1.85	26.63	145.6	0.596	
504	6.01	34.27	0.42	300	7.40	34.16	1.31	26.72	137.8	0.667	
607	5.50	34.36	0.28	400	6.53	34.22	0.69	26.89	122.9	0.798	
810	4.71	34.43	0.33	500	6.02	34.27	0.42	27.00	113.8	0.916	
1009	3.92	34.50	0.66	600	5.53	34.35	0.30	27.17	98.1	1.022	
1214	3.68	34.60	0.69	700	5.10	34.41	0.32	27.22	94.1	1.118	
				800	4.75	34.43	0.35	27.27	89.3	1.209	
				1000	3.95	34.50	0.64	27.42	76.3	1.375	

E Evaporation of salinity samples occurred on all Paolina-T stations of Cruise 5009. Individual salinity values must be considered doubtful (see introduction). They appear to be 0.04‰ higher on an average.

S10

CCOFI 5009

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

100.60 PAOLINA-T; September 21, 1950; 1052 GCT; 30°49'N, 118°31'W; sounding, 1,052 fm; wind, 280°, force 1; weather, overcast; sea, moderate; wire angle, 3°.

0	18.71	33.60E	4.46	0	18.71	33.60	4.46	24.05	387.6	0.000
10	18.60	33.66	4.21	10	18.60	33.66	4.21	24.12	380.9	0.038
25	16.81	33.57	4.64	20	18.35	33.63	4.59	24.16	377.5	0.076
49	11.95	33.46	4.16	30	14.64	33.49	4.60	24.91	306.4	0.111
74	10.62	33.58	3.40	50	11.80	33.46	4.15	25.45	254.8	0.167
98	9.59	33.68	2.85	75	10.55	33.59	3.40	25.78	224.3	0.227
140p	8.68	33.93	2.28	100	9.55	33.70	2.70	26.03	200.4	0.280
231p	7.37	34.10	1.67	150	8.54	33.96	2.20	26.40	166.6	0.371
328p	6.57	34.22	0.97	200	7.76	34.05	1.87	26.58	149.4	0.450
424p	6.22	34.27	0.68	250	7.16	34.13	1.52	26.73	135.9	0.522
536p	5.69	34.34	0.38	300	6.74	34.19	1.15	26.84	126.5	0.587
712p	4.74	34.39	0.37	400	6.30	34.26	0.73	26.95	116.9	0.709
896p	4.15	34.49	0.60	500	5.87	34.33	0.46	27.06	107.4	0.821
1069p	3.70	34.53	0.67	600	5.37	34.35	0.37	27.14	100.8	0.925
				700	4.80	34.38	0.35	27.23	92.6	1.021
				800	4.43	34.44	0.47	27.32	84.6	1.111
				1000	3.86	34.52	0.65	27.44	73.7	1.269

100.70 PAOLINA-T; September 21, 1950; 0317 GCT; 30°20.5'N, 119°27'W; sounding, 2,080 fm; wind, 260°, force 2; weather, cloudy; sea, moderate; wire angle, 14°.

0	18.65	33.60E	4.76	0	18.65	33.60	4.76	24.06	386.1	0.000
10	18.60	33.56	4.75	10	18.60	33.56	4.75	24.04	386.2	0.039
24	18.45	33.55	4.88	20	18.57	33.55	4.82	24.04	388.5	0.078
48	14.93	33.45	5.60	30	18.38	33.55	5.12	24.09	384.3	0.116
72	11.87	33.17	5.14	50	14.75	33.42	5.60	24.83	314.3	0.186
96	10.79	33.37	4.46	75	11.75	33.17	5.05	25.24	275.9	0.260
117p	10.05	33.42	4.18	100	10.64	33.38	4.38	25.60	241.8	0.325
257p	7.70	34.05	2.45	150	9.30	33.55	3.62	25.96	208.5	0.438
368p	6.02	34.14	1.52	200	8.47	33.90	2.94	26.36	170.9	0.532
470p	5.60	34.20	0.75	250	7.80	34.04	2.50	26.57	151.6	0.612
782p	4.63	34.54	0.36	300	6.99	34.10	2.12	26.73	136.6	0.685
979p	3.90	34.56	0.64	400	5.80	34.16	1.20	26.94	117.9	0.812
1180p	3.37	34.59	0.82	500	(5.56)	(34.22)	(0.72)	(27.01)	(111.6)	(0.927)
				600	(5.28)	(34.34)	(0.68)	(27.14)	(100.4)	(1.033)
				700	(4.95)	(34.47)	(0.48)	(27.28)	(87.8)	(1.127)
				800	4.53	34.55	0.37	27.39	77.7	(1.209)
				1000	3.83	34.56	0.67	27.48	70.4	(1.357)

100.80 PAOLINA-T; September 20, 1950; 2025 GCT; 30°00'N, 120°09'W; sounding, 1,950 fm; wind, 320°, force 4; weather, cloudy; sea, rough; wire angle, 20°.

0	19.19	33.37E	4.20	0	19.19	33.37	4.20	23.75	415.8	0.000
10	19.04	33.35	4.29	10	19.04	33.35	4.29	23.77	414.0	0.042
24	18.46	33.22	4.51	20	18.65	33.23	4.45	23.78	413.7	0.083
52	14.70	33.26	4.88	30	17.95	33.22	4.63	23.94	398.3	0.124
76	13.16	33.24	4.77	50	15.50	33.26	4.87	24.54	341.6	0.197
104	10.88	33.21	4.41	75	13.20	33.24	4.77	25.01	297.5	0.277
157	9.39	33.62	3.27	100	11.23	33.21	4.48	25.36	264.4	0.348
209	8.51	33.96	2.99	150	9.54	33.52	3.37	25.89	214.5	0.467
314	7.49	34.16	1.24	200	8.63	33.92	3.05	26.35	171.8	0.564
425	6.58	34.29	0.74	250	8.03	34.06	2.45	26.55	153.4	0.645
531	5.89	34.34	0.55	300	7.59	34.14	1.40	26.68	142.0	0.718
637	5.34	34.33	0.35	400	6.78	34.27	0.80	26.90	122.6	0.851
847	4.39	34.49	0.38	500	6.08	34.33	0.60	27.03	110.2	0.967
1061	3.75	34.58	0.63	600	5.52	34.33	0.40	27.10	104.2	1.074
1266	3.22	34.58	0.87	700	5.02	34.36	0.35	27.19	96.8	1.175
				800	4.58	34.47	0.37	27.32	84.2	1.265
				1000	3.90	34.57	0.55	27.48	70.5	1.421

E Evaporation (see page 311).

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

PAOLINA-T; September 20, 1950; 1232 GCT; 29°37'N, 120°52'W; sounding, 2,100 fm; wind, 350°, force 5; weather, partly cloudy; sea, rough; wire angle, 28°. 100.90

0	18.78	33.24E	4.55	0	18.78	33.24	4.55	23.75	415.6	0.000
9	18.79	33.24	4.82	10	18.79	33.24	4.82	23.75	416.0	0.042
22	18.78	33.21	4.83	20	18.78	33.21	4.83	23.73	418.0	0.083
49	16.77	33.40	5.12	30	18.45	33.26	4.88	23.85	407.1	0.125
70	15.63	33.40	5.41	50	16.74	33.40	5.15	24.37	358.3	0.201
96	13.55	33.35	5.30	75	15.52	33.39	5.40	24.64	333.3	0.288
141	12.02	33.62	4.62	100	13.27	33.35	5.27	25.08	291.4	0.366
183	9.44	33.73	3.73	150	11.60	33.65	4.41	25.64	239.6	0.498
266	7.81	34.04	2.83	200	8.95	33.78	3.47	26.19	187.1	0.605
354	6.93	34.18	1.51	250	8.04	33.99	2.95	26.50	158.8	0.692
437	6.34	34.25	0.81	300	7.44	34.11	2.50	26.68	142.1	0.766
694	5.00	34.47	0.32	400	6.60	34.23	0.94	26.89	123.1	0.899
881	4.33	34.50	0.58	500	5.94	34.30	0.80	27.03	110.5	1.016
1076	3.73	34.52	0.67	600	5.42	34.39	0.49	27.16	98.4	1.120
				700	4.96	34.47	0.32	27.28	87.9	1.213
				800	4.59	34.50	0.43	27.35	82.1	1.298
				1000	3.94	34.51	0.65	27.42	75.4	1.456

PAOLINA-T; September 20, 1950; 0448 GCT; 29°15'N, 121°37'W; sounding, 2,100 fm; wind, 020°, force 5; weather, partly cloudy; sea, rough; wire angle, 15°. 100.100

0	19.29	33.35E	4.41	0	19.29	33.35	4.41	23.71	420.0	0.000
10	19.29	33.33	4.42	10	19.29	33.33	4.42	23.69	421.7	0.042
25	18.95	33.30	4.47	20	19.15	33.30	4.45	23.71	420.6	0.084
53	17.67	33.66	4.76	30	18.65	33.30	4.51	23.83	408.9	0.126
77	16.44	33.69	4.93	50	17.78	33.64	4.72	24.31	364.4	0.203
106	14.58	33.60	4.51	75	16.55	33.69	4.92	24.63	333.7	0.290
157	10.78	33.58	4.01	100	15.20	33.62	4.62	24.89	310.4	0.371
209	9.16	33.86	3.51	150	11.08	33.58	4.05	25.68	235.6	0.507
312	7.34	-	2.00	200	9.35	33.75	3.60	26.10	195.5	0.615
421	6.62	34.20	0.88	250	8.24	(34.04)	2.90	(26.51)	(158.0)	(0.704)
526	5.90	34.26	0.58	300	7.48	(34.12)	2.15	(26.68)	(141.9)	(0.778)
633	5.45	34.41	0.39	400	6.73	(34.19)	1.05	(26.84)	(127.8)	(0.913)
844	4.47	34.43	0.41	500	6.08	34.23	0.64	26.96	117.6	(1.036)
1059	3.82	34.52	0.65	600	5.58	34.37	0.43	27.13	102.0	(1.146)
1264	3.29	34.56	0.85	700	5.15	34.42	0.40	27.22	94.0	(1.244)
				800	4.68	34.42	0.40	27.27	89.2	(1.335)
				1000	3.97	34.50	0.57	27.41	76.5	(1.501)

PAOLINA-T; September 19, 1950; 2235 GCT; 29°00.5'N, 122°07'W; sounding, 2,250 fm; wind, 350°, force 3; weather, partly cloudy; sea, moderate; wire angle, 20°. 100.110

0	19.50	33.30E	4.28	0	19.50	33.30	4.28	23.62	428.5	0.000
9	19.40	33.26	4.36	10	19.38	33.26	4.36	23.62	428.8	0.043
24	18.92	33.28	4.44	20	19.10	33.27	4.41	23.70	421.6	0.085
52	16.47	33.48	4.69	30	18.35	33.30	4.50	23.91	401.8	0.127
76	16.05	33.60	4.62	50	16.52	33.45	4.69	24.46	349.8	0.202
104	14.61	33.60	4.51	75	16.08	33.60	4.62	24.67	330.0	0.287
155	11.73	33.62	4.08	100	14.87	33.60	4.52	24.94	305.0	0.366
207	9.37	33.77	3.54	150	12.00	33.62	4.15	25.54	249.0	0.504
311	7.65	34.04	2.14	200	9.56	33.74	3.62	26.06	199.6	0.616
420	6.42	34.14	1.24	250	8.53	33.95	3.03	26.39	169.0	0.709
526	5.80	34.25	0.51	300	7.80	34.03	2.31	26.56	153.1	0.789
632	5.22	34.34	0.45	400	6.57	34.12	1.41	26.81	130.9	0.931
843	4.50	34.45	0.41	500	5.95	34.22	0.60	26.96	116.6	1.055
1056	3.82	34.49	0.65	600	5.38	34.32	0.45	27.11	103.1	1.165
1261	3.35	34.56	0.83	700	4.96	34.38	0.44	27.21	94.5	1.264
				800	4.64	34.43	0.41	27.29	87.9	1.355
				1000	3.97	34.48	0.57	27.40	78.0	1.521

E Evaporation (see page 311).

SIO

CCOFI 5009

OBSERVED					INTERPOLATED					COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m
105.35	PAOLINA-T; September 7, 1950; 0906 GCT; 30°39'N, 116°33'W; sounding, 660 fm; wind, 290°, force 1; weather, overcast; sea, smooth; wire angle, 10°.											
0	19.40	33.58E	5.08		0	19.40	33.58	5.08		23.86	405.7	0.000
10	19.37	33.64	4.97		10	19.37	33.64	4.97		23.91	400.9	0.040
25	14.10	33.57	6.06		20	19.25	33.58	5.95		23.89	402.7	0.080
49	11.20	33.58	4.33		30	13.15	33.57	5.90		25.28	271.2	0.114
74	10.38	33.71	3.45		50	11.10	33.58	4.30		25.67	233.8	0.165
98	9.96	33.84	2.68		75	10.35	33.71	3.38		25.91	212.1	0.220
152	9.77	34.14	1.84		100	9.95	33.85	2.62		26.08	195.7	0.271
201	8.85	34.16	1.93		150	9.79	34.14	1.84		26.34	172.7	0.363
299	7.88	34.18	1.41		200	8.85	34.16	1.93		26.50	157.4	0.446
403	7.54	34.35	0.86		250	8.22	34.17	1.81		26.61	148.1	0.523
501	6.76	34.31	0.49		300	7.88	34.18	1.39		26.67	143.2	0.595
604	5.90	34.34	0.43		400	7.55	34.35	0.87		26.85	127.5	0.730
703	5.40	34.43	0.37		500	6.77	34.31	0.49		26.93	121.0	0.855
806	4.90	34.47	0.44		600	5.93	34.34	0.42		27.06	108.7	0.970
1004	3.96	34.58	0.58		700	5.41	34.43	0.37		27.20	96.5	1.072
					800	4.92	34.47	0.43		27.29	88.5	1.165
					1000	3.98	34.58	0.57		27.48	70.7	1.325
110.35	PAOLINA-T; September 17, 1950; 0640 GCT; 29°46.5'N, 116°00'W; sounding, 700 fm; wind, 270°, force 3; weather, overcast; sea, rough; wire angle, 28°.											
0	18.87	33.69E	4.96		0	18.87	33.69	4.96		24.07	384.9	0.000
9	18.86	33.60	4.74		10	18.86	33.60	4.75		24.01	391.5	0.039
22	16.69	33.53	5.28		20	18.75	33.54	5.28		23.99	393.5	0.078
44	12.24	33.48	4.81		30	12.25	33.50	5.17		25.40	259.5	0.111
66	11.21	33.58	4.26		50	12.26	33.49	4.67		25.39	260.9	0.163
87	10.39	33.75	3.34		75	10.70	33.66	3.90		25.81	221.6	0.223
132	9.89	34.11	2.01		100	10.20	33.86	2.87		26.05	199.1	0.276
170	9.76	34.25	1.58		150	9.82	34.19	1.78		26.37	169.5	0.368
249	9.31	34.38	0.85		200	9.62	34.31	1.28		26.50	158.5	0.449
333	8.48	34.47	0.69		250	9.30	34.38	0.85		26.60	149.2	0.527
415	7.47	34.47	0.33		300	8.85	34.45	0.72		26.73	137.9	0.598
503	6.53	34.43	0.39		400	7.65	34.47	0.37		26.93	120.1	0.727
682	5.27	34.41	0.41		500	6.58	34.43	0.38		27.05	109.5	0.842
866	4.42	34.56	0.54		600	5.78	34.41	0.42		27.14	101.6	0.947
1066	3.76	34.54	0.72		700	5.18	34.42	0.40		27.22	94.3	1.045
					800	4.69	34.52	0.46		27.35	81.9	1.133
					1000	3.96	34.55	0.65		27.45	72.7	1.289
110.40	PAOLINA-T; September 17, 1950; 1035 GCT; 29°36.5'N, 116°19.5'W; sounding, 1,030 fm; wind, 320°, force 2; weather, overcast; sea, moderate; wire angle, 10°.											
0	19.00	33.64E	4.78		0	19.00	33.64	4.78		24.00	391.6	0.000
10	19.00	33.66	4.62		10	19.00	33.66	4.62		24.02	390.5	0.039
24	17.37	33.58	5.57		20	18.85	33.62	5.54		24.03	390.1	0.078
49	13.31	33.48	5.24		30	15.80	33.53	5.56		24.68	327.7	0.114
73	11.28	33.58	3.91		50	13.25	33.48	5.20		25.19	280.2	0.175
98	10.53	33.78	2.86		75	11.20	33.61	3.75		25.68	233.8	0.239
152	–	34.11	1.40		100	10.48	33.82	2.78		25.97	206.6	0.294
201	8.91	34.16	2.12r		150	9.46	34.10	1.45		26.36	170.4	0.388
300	8.77	34.54	0.57		200	8.92	34.16	0.93		26.49	158.5	0.470
404	7.44	34.40	0.60		250	8.85	34.43	0.67		26.72	138.4	0.545
502	6.66	34.43	0.33		300	8.77	34.54	0.57		26.81	130.0	0.612
606	5.65	34.36	0.34		400	7.50	34.40	0.60		26.90	123.1	0.738
810	4.59	34.48	0.46		500	6.68	34.43	0.33		27.03	110.8	0.855
1010	3.86	34.53	0.74		600	5.70	34.36	0.33		27.11	104.3	0.963
1215	3.38	34.60	0.80		700	5.05	34.51	0.37		27.22	93.4	1.062
					800	4.63	34.48	0.44		27.33	84.1	1.150
					1000	3.90	34.53	0.72		27.44	73.4	1.309

E Evaporation (see page 311).

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
PAOLINA-T; September 17, 1950; 1627 GCT; 29°19'N, 117°02'W; sounding, 1,700 fm; wind, 300°, force 2; weather, cloudy; sea, moderate; wire angle, 5°.													110.50
0	17.03	33.51E	5.60		0	17.03	33.51	5.60		24.39	355.2	0.000	
10	16.86	33.49	5.19		10	16.86	33.49	5.19		24.41	353.2	0.035	
25	13.76	33.46	4.76		20	14.25	33.46	4.85		24.97	300.5	0.068	
49	11.53	33.57	4.33		30	13.38	33.46	4.67		25.15	283.6	0.097	
74	9.95	33.64	3.88		50	11.50	33.57	4.30		25.59	241.4	0.150	
115p	-	33.42r	0.91		75	9.90	33.65	3.88		25.94	209.2	0.206	
151p	10.06	34.31	0.81		100	9.1	33.72	1.07		26.12	191.6	0.256	
212p	9.15	34.43	0.52		150	10.07	34.31	0.82		26.42	164.8	0.345	
295p	8.18	34.43	0.49		200	9.31	34.43	0.57		26.64	144.6	0.423	
384p	7.12	34.40	0.40		250	8.70	34.43	0.50		26.74	136.1	0.493	
479p	6.34	34.36	0.33		300	8.13	34.43	0.49		26.83	128.4	0.558	
654p	5.31	34.38	0.46		400	6.98	34.39	0.38		26.96	116.5	0.681	
833p	4.74	34.40	0.37		500	6.20	34.36	0.35		27.04	109.5	0.795	
979p	4.23	34.47	0.57		600	5.59	34.37	0.43		27.13	102.1	0.901	
					700	5.14	34.38	0.45		27.19	96.8	1.000	
					800	4.84	34.39	0.38		27.23	93.4	1.095	
					1000	(4.15)	(34.48)	(0.59)		(27.38)	(80.2)	(1.269)	
PAOLINA-T; September 17, 1950; 2231 GCT; 28°59'N, 117°41'W; sounding, 2,000 fm; wind, 180°, force 1; weather, cloudy; sea, slight; wire angle, 0°.													110.60
0	19.29	33.60E	4.96		0	19.29	33.60	4.96		23.90	401.5	0.000	
10	18.96	33.60	4.92		10	18.96	33.60	4.92		23.98	394.4	0.040	
25	18.73	33.57	4.84		20	18.80	33.59	4.86		24.02	391.1	0.079	
50	14.72	33.31	5.32		30	18.40	33.51	4.88		24.05	387.7	0.118	
75	12.68	-	5.09		50	14.72	33.31	5.32		24.75	321.7	0.189	
100	11.05	33.62	3.99		75	12.68	33.43	5.09		25.26	273.9	0.263	
154	-	34.02	2.11		100	11.05	33.62	3.99		25.71	231.1	0.327	
204	9.86	34.31	1.27		150	10.49	33.98	2.20		26.09	196.1	0.434	
304	7.88	34.23	1.02		200	9.91	34.31	1.31		26.45	163.2	0.523	
408	6.90a)	34.31	0.61		250	8.82	34.28	1.07		26.60	149.0	0.601	
507	6.41	34.34	0.47		300	7.96	34.23	1.02		26.70	140.7	0.674	
611	5.75	34.42	0.30		400	6.95	34.30	0.64		26.90	122.7	0.805	
814	4.73	-	0.39		500	6.45	34.34	0.48		26.99	114.4	0.924	
1012	4.04	34.47	0.60		600	5.83	34.41	0.30		27.13	102.2	1.032	
1217	3.54	34.52	0.72		700	5.27	(34.43)	0.32		(27.21)	(94.7)	(1.131)	
					800	4.78	(34.43)	0.38		(27.27)	(89.7)	(1.223)	
					1000	4.08	(34.47)	0.57		(27.38)	(80.0)	(1.393)	
PAOLINA-T; September 18, 1950; 0434 GCT; 28°36'N, 118°18'W; sounding, 2,000 fm; wind, 270°, force 2; weather, partly cloudy; sea, moderate; wire angle, 0°.													110.70
0	19.29	33.54E	4.89		0	19.29	33.54	4.89		23.85	406.2	0.000	
10	18.86	33.49	4.64		10	18.86	33.49	4.64		23.92	399.5	0.040	
25	18.27	33.48	4.95		20	18.45	33.48	4.82		24.02	390.8	0.080	
50	14.72	33.30	5.41		30	17.70	33.54	5.08		24.18	375.8	0.118	
75	12.29	33.40	5.20		50	14.72	33.30	5.41		24.74	322.7	0.188	
100	10.66	33.62	3.85		75	12.29	33.40	5.20		25.31	268.9	0.262	
155	10.10	34.18	3.07		100	10.66	33.62	3.85		25.78	224.4	0.324	
205	10.27	34.42	2.28		150	10.10	34.13	3.12		26.28	178.5	0.425	
304	9.45	34.45	0.70		200	10.25	34.41	2.37		26.47	161.5	0.509	
409	7.98	34.42	-		250	10.01	34.44	1.35		26.53	156.3	0.588	
508	7.18	34.42	0.50		300	9.48	34.45	0.74		26.63	147.9	0.665	
613	6.39	34.35	0.44		400	8.06	34.42	0.50		26.83	129.8	0.804	
816	4.85	34.42	0.31		500	7.25	34.42	0.50		26.95	119.6	0.929	
1016	4.12	34.46	0.59		600	6.50	34.35	0.45		27.00	115.7	1.046	
1221	3.64	34.52	0.95		700	5.68	34.37	0.38		27.12	104.5	1.156	
					800	4.95	34.42	0.30		27.24	92.5	1.255	
					1000	4.16	34.46	0.56		27.36	81.8	1.429	

a) Alternate value, 7.28°C, not used in interpolation.

E Evaporation (see page 311).

S10

CCOFI 5009

110.80 PAOLINA-T; September 18, 1950; 1100 GCT; 28°20'N, 118°58'W; sounding, 2,175 fm; wind, 320°, force 2; weather, clear; sea, moderate; wire angle, 2°.

OBSERVED					INTERPOLATED					COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m
0	19.80	33.62E	4.45		0	19.80	33.62	4.45		23.78	412.6	0.000
10	19.78	33.62	4.44		10	19.78	33.62	4.44		23.79	412.5	0.041
25	19.68	33.64	4.36		20	19.72	33.64	4.40		23.82	409.9	0.082
50	13.92	33.58	5.19		30	19.68	33.64	4.45		23.83	409.2	0.123
75	11.66	33.65	3.79		50	13.92	33.58	5.19		25.13	285.7	0.193
99	10.30	33.73	3.05		75	11.66	33.65	3.79		25.62	239.1	0.258
154	9.30	34.00	2.80		100	10.27	33.74	3.03		25.94	209.1	0.314
203	8.42	34.14	2.28		150	9.42	33.99	2.82		26.28	177.9	0.411
302	7.64	34.22	1.10		200	8.45	34.13	2.33		26.54	153.6	0.494
406	7.41	34.38	0.49		250	8.02	34.19	1.65		26.66	143.7	0.568
504	6.64	34.43	0.36		300	7.66	34.22	1.12		26.73	137.1	0.638
608	5.79	34.43	0.33		400	7.43	34.37	0.51		26.88	124.3	0.769
811	4.77	34.46	0.33		500	6.71	34.43	0.35		27.03	111.3	0.887
1010	4.06	34.49	0.68		600	5.84	34.43	0.35		27.14	100.9	0.993
1215	3.56a)	34.54	0.70		700	5.30	34.44	0.34		27.22	94.4	1.091
					800	4.82	34.46	0.34		27.29	88.0	1.182
					1000	4.10	34.49	0.67		27.39	78.8	1.348

110.90 PAOLINA-T; September 18, 1950; 1725 GCT; 28°04'N, 119°42'W; sounding, 2,100 fm; wind, 340°, force 2; weather, partly cloudy; sea, rough; wire angle, 2°.

0	19.76	33.57E	4.89		0	19.76	33.57	4.89		23.76	415.3	0.000
10	19.40	33.59	5.03		10	19.40	33.59	5.03		23.86	405.3	0.041
25	19.15	33.58	5.19		20	19.20	33.59	5.14		23.91	400.8	0.081
49	13.42	33.48	5.68		30	19.05	33.54	5.28		23.91	401.1	0.121
74	10.83	33.62	3.52		50	13.25	33.48	5.68		25.19	280.2	0.190
99	9.74	33.75	3.11		75	10.80	33.64	3.50		25.77	224.8	0.253
154	9.71	34.15	1.59		100	9.73	33.76	3.08		26.05	198.8	0.306
204	9.24	34.24	1.43		150	9.72	34.14	1.65		26.35	171.6	0.398
304	7.77	34.27	0.94		200	9.28	34.24	1.45		26.50	158.2	0.480
409	6.78	34.29	0.55		250	8.56	34.26	1.20		26.63	146.5	0.557
509	6.17	34.35	0.39		300	7.85	34.27	0.95		26.74	136.1	0.627
614	5.68	34.38	0.32		400	6.85	34.29	0.58		26.90	122.1	0.756
819	4.67	34.45	0.43		500	6.21	34.35	0.40		27.03	110.4	0.873
1019	3.92	34.46	0.72		600	5.75	34.37	0.33		27.11	104.2	0.980
1224	3.45	34.52	0.84		700	5.26	34.42	0.33		27.21	95.4	1.080
					800	4.76	34.45	0.40		27.29	87.9	1.171
					1000	3.98	34.46	0.70		27.38	76.6	1.339

110.100 PAOLINA-T; September 18, 1950; 2355 GCT; 27°40'N, 120°18'W; sounding, 2,200 fm; wind, 030°, force 2; weather, cloudy; sea, rough; wire angle, 0°.

0	20.44	33.40E	4.98		0	20.44	33.40	4.98		23.45	444.6	0.000
10	19.71	33.39	4.75		10	19.71	33.39	4.75		23.63	427.4	0.044
25	19.69	33.40	5.13		20	19.70	33.40	5.00		23.64	426.8	0.086
49	16.20	33.31	5.37		30	19.50	33.39	5.20		23.69	422.9	0.129
74	14.57	33.33	5.50		50	16.10	33.31	5.38		24.45	350.8	0.206
99	13.83	33.64	5.15		75	14.52	33.33	5.50		24.81	316.9	0.290
153	10.75	33.68	4.10		100	13.78	33.64	5.15		25.20	280.1	0.364
203	9.11	33.91	3.28		150	10.85	33.67	4.15		25.79	225.0	0.490
302	7.24	34.04	2.11		200	9.23	33.90	3.32		26.24	182.5	0.593
406	6.42	34.14	1.04		250	7.98	33.99	2.70		26.51	157.9	0.678
504	5.65	34.22	0.78		300	7.27	34.04	2.13		26.65	144.9	0.753
608	5.11	34.29	0.48		400	6.48	34.13	1.08		26.83	128.9	0.890
812	4.39	34.38	0.60		500	5.67	34.22	0.80		27.00	113.0	1.011
1012	3.82	34.47	0.75		600	5.15	34.29	0.50		27.12	102.5	1.119
1217	3.37	34.51	0.85		700	4.75	34.33	0.50		27.19	95.7	1.218
					800	4.44	34.37	0.59		27.26	89.9	1.310
					1000	3.85	34.46	0.75		27.39	78.0	1.478

a) Alternate value, 3.46°C, not used in interpolation.

E Evaporation (see page 311).

PAOLINA-T; September 19, 1950; 0603 GCT; 27°16.5'N, 120°54.5'W; sounding, 2,210 fm; wind, 330°, force 1; weather, partly cloudy; sea, rough; wire angle, 0°. 110.110

OBSERVED Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg at/L	INTERPOLATED Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg at/L	COMPUTED σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m
0	20.33	33.30E	4.68		0	20.33	33.30	4.68		23.40	449.3	0.000
10	19.29	33.25	4.23		10	19.29	33.25	4.23		23.63	427.5	0.044
25	18.82	33.28	4.26		20	18.92	33.26	4.23		23.73	418.0	0.086
50	16.57	33.48	4.63		30	18.60	33.40	4.32		23.92	400.5	0.127
76	15.18	33.37	4.71		50	16.57	33.48	4.63		24.47	348.9	0.202
102	13.18	33.22	4.38		75	15.20	33.38	4.70		24.70	327.3	0.287
159	10.41	33.57	3.86		100	13.40	33.22	4.41		24.96	303.4	0.365
211	8.82	33.87	2.83		150	10.75	33.48	3.95		25.66	237.3	0.500
315	7.40	34.11	1.56		200	9.08	33.82	3.02		26.20	186.1	0.606
423	6.36	34.18	0.91		250	8.15	34.00	2.22		26.49	159.6	0.693
524	5.57	34.23	0.53		300	7.55	34.09	1.67		26.65	145.1	0.769
628	4.99	34.33	0.43		400	6.57	34.17	1.02		26.84	127.2	0.905
832	4.24	34.43	0.50		500	5.74	34.21	0.60		26.98	114.6	1.026
1033	3.71	34.49	0.82		600	5.12	34.30	0.45		27.13	101.4	1.134
1244	3.23	34.52	0.84		700	4.65	34.38	0.43		27.25	90.7	1.230
					800	4.35	34.42	0.48		27.31	85.2	1.318
					1000	3.80	34.48	0.75		27.42	75.9	1.479

PAOLINA-T; September 16, 1950; 2353 GCT; 29°12'N, 115°39'W; sounding, 750 fm; wind, 290°, force 3; weather, cloudy; sea, rough; wire angle, 21°. 113.35

0	19.11	33.60E	5.08		0	19.11	33.60	5.08		23.95	396.9	0.000
10	19.09	33.56	4.80		10	19.09	33.56	4.80		23.92	400.2	0.040
24	18.70	33.55	4.98		20	19.09	33.55	4.87		23.91	401.0	0.080
46	14.94	33.42	5.52		30	17.45	33.53	5.20		24.30	364.2	0.118
69	12.39	33.53	4.68		50	14.30	33.42	5.43		24.92	305.2	0.185
91	11.08	33.58	3.85		75	11.95	33.54	4.43		25.49	252.2	0.255
140	9.82	33.80	3.09		100	10.65	33.60	3.66		25.77	225.7	0.314
183	10.12	34.23	1.55		150	9.86	33.89	2.84		26.13	192.3	0.419
270	9.24	34.42	0.94		200	10.05	34.30	1.35		26.42	166.2	0.509
362	8.31	34.42	0.70		250	9.48	34.41	1.02		26.60	149.8	0.587
450	7.59	34.43	0.36		300	8.87	34.42	0.85		26.71	140.4	0.660
544	6.58	34.43	0.30		400	8.05	34.42	0.57		26.83	129.7	0.795
730	5.04	34.42	0.43		500	7.05	34.43	0.32		26.98	116.0	0.918
916	4.33	34.45	0.53		600	6.04	34.43	0.31		27.12	103.6	1.028
1113	3.67	34.51	0.59		700	5.21	34.42	0.39		27.21	94.7	1.127
					800	4.75	34.42	0.48		27.27	90.0	1.220
					1000	4.07	34.48	0.56		27.39	79.2	1.389

PAOLINA-T; September 16, 1950; 1730 GCT; 28°37'N, 115°16'W; sounding, 123 fm; wind, 290°, force 2; weather, overcast; sea, very rough; wire angle, 0°. 117.35

0	17.39	33.48E	5.02		0	17.39	33.48	5.02		24.27	365.8	0.000
10	16.58	33.46	5.08		10	16.58	33.46	5.08		24.49	345.2	0.036
25	14.44	33.42	4.58		20	14.85	33.42	4.72		24.81	315.5	0.069
50	12.38	33.53	4.33		30	13.95	33.43	4.52		25.01	296.9	0.099
75	11.08	33.71	3.18		50	12.38	33.53	4.33		25.40	259.4	0.155
100	10.36	33.92	2.60		75	11.08	33.71	3.18		25.78	224.4	0.215
155	9.95	34.23	1.76		100	10.36	33.92	2.60		26.07	197.3	0.268
180	10.03	34.22	1.59		150	9.95	34.23	1.82		26.37	169.4	0.360

E Evaporation (see page 311).

S10

CCOFI 5009

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

120.27 PAOLINA-T; September 16, 1950; 0729 GCT; 28°19'N, 114°23'W; sounding, 50 fm; wind, 320°, force 5; weather, haze; sea, moderate; wire angle, 15°.

0	19.24	33.73E	5.08	0	19.24	33.73	5.08	24.01	390.9	0.000
10	19.24	33.68	5.25	10	19.24	33.68	5.25	23.97	395.1	0.039
24	19.23	33.71	4.87	20	19.23	33.70	4.91	23.99	393.5	0.079
48	14.25	33.51	5.02	30	19.22	33.70	4.90	23.99	393.6	0.118
72	11.74	33.68	3.77	50	13.75	33.51	5.00	25.11	287.7	0.186

120.35 PAOLINA-T; September 16, 1950; 0235 GCT; 28°03'N, 114°54'W; sounding, 45 fm; wind, 040°, force 3; weather, haze; sea, moderate; wire angle, 0°.

0	18.99	33.68E	5.19	0	18.99	33.68	5.19	24.04	388.5	0.000
10	19.00	33.66	4.34	10	19.00	33.66	4.34	24.02	390.5	0.039
25	18.75	33.77	5.04	20	18.88	33.73	4.94	24.10	382.9	0.078
45	15.42	33.64	5.09	30	18.30	33.76	5.07	24.27	367.2	0.115
70	12.19	33.68	3.62	50	14.00	33.64	5.05	25.16	283.1	0.180

120.45 PAOLINA-T; September 15, 1950; 2018 GCT; 27°43'N, 115°32'W; sounding, 800 fm; wind, 320°, force 3; weather, cloudy; sea, rough; wire angle, 30°.

0	18.02	33.69E	4.47	0	18.02	33.69	4.47	24.29	364.5	0.000
10	17.90	33.62	4.39	10	17.90	33.62	4.39	24.26	367.4	0.037
24	14.94	33.60	4.72	20	16.00	33.60	4.67	24.69	326.6	0.071
49	11.40	33.53	3.73	30	13.72	33.59	4.60	25.18	280.7	0.102
73	10.69	33.75	3.09	50	11.35	33.53	3.70	25.59	241.8	0.154
97	9.82	33.80	3.16	75	10.63	33.75	3.09	25.89	213.8	0.211
151	9.16	34.00	2.60	100	9.75	33.81	3.16	26.09	195.5	0.262
199	8.88	34.13	2.05	150	9.17	33.99	2.60	26.32	174.0	0.354
295	8.64	34.31	1.01	200	8.87	34.13	2.03	26.48	159.9	0.437
395	8.32	34.42	0.49	250	8.72	34.23	1.46	26.58	151.2	0.516
491	7.13	34.45	0.33	300	8.64	34.32	0.97	26.66	144.2	0.589
591	5.95	34.43	0.32	400	8.28	34.42	0.48	26.80	133.2	0.728
695p	5.54	34.45	0.27	500	6.98	34.45	0.32	27.01	113.6	0.851
788p	4.85	34.43	0.31	600	5.90	34.43	0.31	27.14	101.7	0.959
				700	5.52	34.45	0.27	27.20	96.5	1.058

120.50 PAOLINA-T; September 15, 1950; 1335 GCT; 27°21'N, 116°10'W; sounding, 2,200 fm; wind, 320°, force 3; weather, overcast; sea, rough; wire angle, 30°.

0	19.81	4.94	0	19.81	4.94
9	19.81	5.20	10	19.81	5.20
22	19.08	5.21	20	19.75	5.21
43	17.65	5.62	30	18.06	5.40
65	17.09	5.56	50	17.52	5.62
86	15.91	5.05	75	16.67	5.25
130	12.70	4.80	100	14.75	4.94
168	10.14	3.37	150	11.02	3.80
239	8.59	2.65	200	9.24	3.06
314	7.56	0.92	250	8.43	2.50
385	7.30	0.79	300	7.69	1.03
461	7.32	0.39	400	7.30	0.72
617	6.09	0.23	500	7.12	0.29
784	5.04	0.36	600	6.24	0.22
978	4.23	0.47	700	5.53	0.25
			800	4.96	0.38
			1000	(4.19)	(0.48)

E Evaporation (see page 311).

PAOLINA-T; September 15, 1950; 0715 GCT; 27°05'N, 116°43'W; sounding, 2,050 fm; wind, 320°, force 3; weather, overcast; sea, rough; wire angle, 6°. 120.60

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
0	19.81	33.66E	4.57		0	19.81	33.66	4.57		23.81	410.0	0.000
10	19.82	33.66	4.48		10	19.82	33.66	4.48		23.81	410.5	0.041
25	19.67	33.64	4.42		20	19.69	33.65	4.42		23.83	408.4	0.082
50	14.83	33.53	4.91		30	19.40	33.62	4.47		23.89	403.8	0.123
74	13.04	33.53	4.57		50	14.83	33.53	4.91		24.90	307.9	0.194
99	10.94	33.68	3.53		75	13.00	33.53	4.54		25.28	272.4	0.266
152	11.50	34.43	0.37		100	10.95	33.77	3.30		25.85	218.3	0.328
201	11.36	34.54	0.43		150	11.48	34.42	0.37		26.26	180.9	0.418
299	10.81	34.69	0.31		200	11.36	34.54	0.42		26.37	171.1	0.515
401	9.82	34.60	0.31		250	11.08	34.66	0.37		26.52	158.5	0.597
498	8.20	34.49	0.28		300	10.80	34.69	0.31		26.59	152.5	0.676
601	7.03	34.47	0.23		400	9.82	34.60	0.31		26.69	144.5	0.823
801	5.43	34.45	0.24		500	8.16	34.49	0.28		26.87	128.0	0.960
998	4.44	34.52	0.46		600	7.05	34.47	0.23		27.02	114.6	1.081
1201	3.76	34.60	0.60		700	6.16	34.46	0.24		27.13	104.3	1.191
					800	5.43	34.45	0.25		27.21	96.5	1.291
					1000	4.43	34.52	0.46		27.36	80.6	1.468

PAOLINA-T; September 15, 1950; 0103 GCT; 26°50'N, 117°15'W; sounding, 2,050 fm; wind, 350°, force 3; weather, overcast; sea, rough; wire angle, 20°. 120.70

0	19.90	33.64E	4.51		0	19.90	33.64	4.51		23.77	413.6	0.000
9	19.91	33.68	4.19		10	19.91	33.68	4.19		23.80	411.3	0.041
23	19.87	33.68	4.36		20	19.87	33.68	4.35		23.81	410.7	0.082
47	17.45	33.93	4.26		30	19.87	33.68	4.33		23.81	411.0	0.123
70	16.50	33.84	4.57		50	17.25	33.93	4.28		24.65	331.2	0.198
93	14.28	33.64	4.82		75	16.25	33.77	4.64		24.77	321.3	0.279
144	10.28	33.75	3.45		100	12.10	33.64	4.80		25.53	248.2	0.350
190	11.24	34.36	0.82		150	10.30	34.00	2.10		26.14	191.4	0.460
282	9.83	34.43	0.97		200	11.21	34.38	0.80		26.27	180.2	0.553
380	9.14	34.50	0.49		250	10.30	34.42	0.91		26.47	162.6	0.639
474	8.19	34.52	0.25		300	9.69	34.44	0.93		26.59	152.1	0.717
573	6.66	34.47	0.26		400	8.98	34.51	0.40		26.76	137.4	0.862
771	5.32	34.42	0.30		500	7.84	34.52	0.25		26.94	120.9	0.991
968	4.49	34.48	0.48		600	6.37	34.45	0.26		27.09	106.5	1.105
1173	3.71	34.56	0.61		700	5.69	34.42	0.28		27.15	100.9	1.209
					800	5.17	34.42	0.31		27.22	95.4	1.307
					1000	4.36	34.49	0.50		27.36	82.0	1.484

PAOLINA-T; September 14, 1950; 1831, 1849 GCT; 26°34'N, 117°50'W; sounding, 2,100 fm; wind, 350°, force 2; weather, overcast; sea, rough; wire angle, 15°, missing. 120.80

0	20.69	33.64E	4.47		0	20.69	33.64	4.47		23.56	433.5	0.000
10	20.66	33.58	4.19		10	20.66	33.58	4.19		23.53	437.5	0.044
24	20.67	33.58	4.04		20	20.67	33.58	4.04		23.52	438.1	0.087
48	18.25	33.66	4.49		30	20.62	33.59	4.07		23.54	436.4	0.131
72	16.87	33.69	4.71		50	18.00	33.67	4.52		24.27	367.3	0.211
96	14.80	33.61	4.81		75	16.65	33.68	4.72		24.60	336.6	0.299
					100	14.45	33.61	4.80		25.04	295.7	0.378
149	11.76	33.64	3.79		150	11.70	33.65	3.75		25.62	241.4	0.513
196	10.52	33.96	2.55		200	10.44	34.01	2.40		26.12	194.1	0.621
287	9.11	34.27	1.14		250	9.66	34.22	1.50		26.42	166.8	0.712
383	7.81	34.29	0.78		300	8.91	34.28	1.05		26.59	151.4	0.791
474	6.82	34.34	0.47		400	7.59	34.29	0.73		26.80	132.5	0.933
569	6.10	34.38	0.33		500	6.62	34.36	0.40		26.99	115.2	1.057
761	5.00	34.43	0.31		600	5.90	34.38	0.32		27.10	105.4	1.168
956	4.22	34.47	0.56		700	5.34	34.41	0.31		27.19	97.1	1.269
1160	3.65	34.58	0.72		800	4.82	34.44	0.31		27.27	89.4	1.362
					1000	4.09	34.50	0.60		27.40	78.0	1.529

E Evaporation (see page 311).

S10

CCOFI 5009

OBSERVED					INTERPOLATED					COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m
120.90	PAOLINA-T; September 14, 1950; 1200 GCT; 26°12'N, 118°30'W; sounding, 2,200 fm; wind, 020°, force 2; weather, overcast; sea, moderate; wire angle, 5°.											
0	21.16	33.86E	4.82		0	21.16	33.86	4.82		23.61	429.4	0.000
10	21.16	33.82	4.68		10	21.16	33.82	4.68		23.57	432.9	0.043
25	21.18	33.86	4.76		20	21.18	33.86	4.72		23.60	430.9	0.086
49	17.84	33.71	5.21		30	21.19	33.86	4.91		23.60	431.5	0.129
74	15.99	33.53	5.19		50	17.65	33.65	5.21		24.34	360.7	0.209
99	14.46	33.66	5.15		75	15.85	33.53	5.19		24.67	330.1	0.295
154	11.11	33.77	3.72		100	14.37	33.67	5.14		25.10	289.7	0.373
203	10.82	34.25	1.76		150	11.15	33.76	4.00		25.80	223.6	0.501
302	9.18	34.52	1.03		200	10.85	34.21	1.81		26.21	186.4	0.604
405	8.13	34.47	0.60		250	10.10	34.46	1.29		26.53	156.3	0.689
504	6.78	34.43	0.44		300	9.20	34.52	1.04		26.73	138.2	0.762
608	6.16	34.52	0.39		400	8.20	34.47	0.61		26.85	128.3	0.896
810	5.01	34.47	0.43		500	6.80	34.43	0.44		27.02	112.5	1.016
1008	4.14	34.58	0.63		600	6.20	34.52	0.40		27.17	99.2	1.122
1213	3.56	34.62	0.69		700	5.63	34.50	0.41		27.23	94.2	1.218
					800	5.07	34.47	0.43		27.27	90.4	1.311
					1000	4.17	34.58	0.63		27.46	73.0	1.474
120.100	PAOLINA-T; September 14, 1950; 0528 GCT; 25°51'N, 119°10'W; sounding, 2,150 fm; wind, 010°, force 4; weather, overcast; sea, rough; wire angle, 10°.											
0	21.51	34.05E	4.68		0	21.51	34.05	4.68		23.65	425.0	0.000
10	21.51	34.04	4.05		10	21.51	34.04	4.05		23.65	426.1	0.043
24	21.45	34.03	4.22		20	21.47	34.03	4.21		23.65	426.1	0.085
49	18.34	33.73	4.22		30	21.43	34.03	4.22		23.66	425.5	0.128
73	15.83	33.51	5.02		50	18.25	33.62	4.23		24.18	376.8	0.208
98	14.06	33.57	4.66		75	15.75	33.51	5.02		24.68	329.4	0.296
152	10.96	33.82	3.16		100	14.00	33.57	4.63		25.10	289.5	0.374
201	9.74	34.16	2.23		150	11.05	33.81	3.25		25.86	218.2	0.500
300	8.53	34.40	0.92		200	9.75	34.15	2.25		26.35	172.4	0.599
404	7.59	34.38	0.49		250	9.05	34.34	1.45		26.61	148.2	0.678
503	6.71	34.36	0.29		300	8.53	34.40	0.92		26.74	136.8	0.749
607	5.90	34.42	0.28		400	7.63	34.38	0.50		26.86	126.4	0.881
810	4.92	34.52	0.33		500	6.75	34.36	0.30		26.97	117.0	1.012
1008	4.18	34.52	0.49		600	5.95	34.41	0.29		27.11	103.8	1.113
1212	3.52	34.56	0.71		700	5.38	34.48	0.30		27.24	92.5	1.211
					800	4.95	34.52	0.32		27.32	85.2	1.300
					1000	4.22	34.52	0.48		27.40	78.1	1.463
120.110	PAOLINA-T; September 13, 1950; 2300, 2323 GCT; 25°32'N, 119°45'W; sounding, 2,150 fm; wind, 360°, force 3; weather, overcast; sea, rough; wire angle, 14°, 13°.											
0	21.21	33.82E	4.54		0	21.21	33.82	4.54		23.56	433.6	0.000
10	21.21	33.77	4.50		10	21.21	33.77	4.50		23.53	437.6	0.044
24	21.16	33.82	4.56		20	21.17	33.82	4.53		23.57	433.5	0.087
49	17.54	33.66	5.17		30	21.09	33.82	4.75		23.59	431.8	0.130
73	16.35	33.64	5.07		50	17.54	33.66	5.17		24.15	379.3	0.211
97	14.82	33.60	4.59		75	16.21	33.63	5.05		24.67	330.6	0.300
					100	14.71	33.60	4.51		24.98	301.7	0.379
151	14.00	33.71	3.28		150	14.00	33.71	3.30		25.21	280.6	0.525
200	11.31a)	34.03	2.07		200	11.31	34.03	2.07		25.99	207.5	0.647
295	8.85	34.27	0.94		250	9.87	34.19	1.39		26.36	172.4	0.741
396	7.76	34.36	0.38		300	8.80	34.28	0.89		26.61	149.7	0.822
492	6.61	34.36	0.50u		400	7.70	34.36	0.37		26.84	128.9	0.962
592	5.84	34.36	0.32		500	6.53	34.36	0.34		27.00	114.0	1.083
791	4.93	34.46	0.41		600	5.80	34.36	0.32		27.09	105.6	1.193
987	4.14	34.52	0.57		700	5.30	34.40	0.35		27.19	97.4	1.294
1191	3.64	34.52	0.61		800	4.89	34.47	0.42		27.29	88.1	1.387
					1000	4.11	34.52	0.58		27.41	76.7	1.552

a) Alternate value, 11.47°C, not used in interpolation.

E Evaporation (see page 311).

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

PAOLINA-T; September 8, 1950; 1353, 1406 GCT; 27°15'N, 114°54'W; sounding, 285 fm; wind, 320°, force 3; weather, partly cloudy; sea, smooth; wire angle, 31°, 35°. 123.40

0	20.01	33.69E	-	0	20.01	33.69		23.78	413.0	0.000
8	20.02	33.66	4.94	10	20.02	33.66	4.95	23.76	415.5	0.041
25	19.62	33.66	5.19	20	20.02	33.66	5.16	23.76	415.9	0.083
42	13.22	33.49	5.01	30	16.75	33.57	5.18	24.50	345.5	0.121
63	11.74	33.58	4.64	50	12.41	33.50	4.89	25.37	262.9	0.182
84	10.70	33.71	3.39	75	11.09	33.67	4.00	25.74	227.5	0.243
				100	10.21	33.79	3.04	25.99	204.4	0.297
119	9.77	33.86	2.86	150	9.15	33.94	2.84	26.29	177.4	0.393
149	9.14	33.93	2.84	200	9.24	34.16	2.06	26.44	163.6	0.478
175	9.21	34.05	2.27	250	8.62	34.11	1.91	26.50	158.5	0.559
206	9.22	34.16	2.01	300	8.47	34.28	1.15	26.66	144.6	0.654
243	8.64	34.11	1.95							
301	8.47	34.29	1.14							
340	8.28	34.38	0.87							
372	8.28	34.40	0.59							

PAOLINA-T; September 8, 1950; 1938 GCT; 26°57'N, 115°30'W; sounding, 2,050 fm; wind, 320°, force 4; weather, cloudy; sea, moderate; wire angle, 18°. 123.50

0	19.54	33.66E	4.57	0	19.54	33.66	4.57	23.88	403.6	0.000
10	19.44	33.68	4.06	10	19.44	33.68	4.06	23.92	399.5	0.040
29	16.43	33.58	5.16	20	19.35	33.62	5.00	23.90	402.2	0.080
57	11.90	33.62	3.97	30	16.15	33.58	5.16	24.64	331.6	0.117
86	10.22	33.78	3.07	50	21.80	33.60	4.30	25.37	262.8	0.176
114	9.89	33.92	2.52	75	10.47	33.73	3.38	25.90	212.6	0.236
171	9.79	34.29	1.20	100	10.00	33.84	2.78	26.07	197.3	0.287
229	-	34.31	1.00	150	9.85	34.26	1.45	26.42	164.8	0.378
344	8.12	34.51	0.23	200	(9.55)	34.30	1.09	(26.50)	(158.1)	(0.458)
455	7.03	34.44	0.22	250	(9.05)	34.33	0.86	(26.61)	(148.9)	(0.535)
570	5.83	34.36	0.33	300	(8.55)	34.45	0.39	(26.78)	(133.3)	(0.605)
682	5.14	34.45	0.40	400	7.57	34.49	0.22	26.96	117.4	(0.731)
910	4.34	34.52	0.50	500	6.55	34.39	0.25	27.02	112.0	(0.845)
1132	3.60	34.52	0.71	600	5.60	34.37	0.36	27.13	102.2	(0.952)
1347	3.10	34.60	0.87	700	5.08	34.46	0.40	27.26	90.1	(1.049)
				800	4.73	34.50	0.45	27.33	83.9	(1.135)
				1000	4.02	34.52	0.56	27.42	75.6	(1.296)

PAOLINA-T; September 9, 1950; 0214 GCT; 26°38.5'N, 116°09'W; sounding, 2,100 fm; wind, 320°, force 5; weather, overcast; sea, rough; wire angle, 30°. 123.60

0	19.83	4.72	0	19.83	4.72	
8	19.83	4.40	10	19.83	4.38	
21	19.81	4.36	20	19.81	4.36	
47	15.40	5.55	30	19.80	4.65	
69	13.16	4.85	50	14.87	5.54	
94	11.90	4.50	75	12.83	4.76	
140	9.80	3.69	100	11.58	4.42	
186	-	1.88	150	(9.77)	3.43	
279	9.21	1.00	200	(9.65)	1.61	
376	8.62	0.37	250	(9.38)	1.13	
469	7.55	0.29	300	9.10	0.87	
562	6.55	0.36	400	8.88	0.32	
749	5.11	0.31	500	7.21	0.30	
945	4.16	0.49	600	6.17	0.37	
1141	3.62	0.58	700	5.40	0.32	
			800	4.84	0.34	
			1000	3.95	0.51	

E Evaporation (see page 311).

S10

CCOFI 5009

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

127.40 PAOLINA-T; September 9, 1950; 2123 GCT; 26°43.5'N, 114°29.5'W; sounding, 1,600 fm; wind, 320°, force 5; weather, haze; sea, rough; wire angle, 23°.

0	20.37	33.64E	4.64	0	20.37	33.64	4.64	23.65	425.4	0.000
9	20.23	33.62	4.36	10	20.22	33.61	4.35	23.67	424.2	0.042
28	17.15	33.57	4.32	20	20.05	33.57	4.32	23.68	423.1	0.085
55	15.48	33.60	4.95	30	17.05	33.57	4.33	24.43	352.2	0.124
83	13.29	33.55	4.70	50	15.80	33.60	4.93	24.74	323.2	0.191
110	11.14	33.64	3.90	75	13.90	33.55	4.85	25.11	288.4	0.268
165	9.16	33.87	3.04	100	11.93	33.59	4.12	25.53	248.8	0.362
220	-	34.11	2.40	150	9.37	33.81	3.23	26.15	190.4	0.445
330	8.07	34.31	0.88	200	(8.85)	34.02	2.65	(26.32)	(175.3)	(0.536)
435	7.11	34.34	0.61	250	(8.55)	34.20	1.93	(26.58)	(150.8)	(0.617)
544	6.26	34.38	0.30	300	(8.26)	34.29	1.19	(26.70)	(140.7)	(0.691)
650	5.60	34.43	0.54r	400	7.45	34.33	0.68	26.85	127.5	(0.824)
868	4.66	34.52	0.32	500	6.57	34.36	0.35	26.99	114.5	(0.945)
1084	3.88	34.53	0.61	600	5.90	34.40	(0.30)	27.11	103.9	(1.055)
1277	3.31	34.51	0.87	700	5.34	34.47	(0.31)	27.24	92.7	(1.152)
				800	4.90	34.51	(0.32)	27.32	85.3	(1.242)
				1000	4.18	34.53	0.45	27.42	76.8	(1.404)

127.50 PAOLINA-T; September 9, 1950; 1441 GCT; 26°23.5'N, 115°08'W; sounding, 2,000 fm; wind, 320°, force 6; weather, cloudy; sea, very rough; wire angle, 20°.

0	20.39	33.55E	4.81	0	20.39	33.55	4.81	23.57	432.7	0.000
10	20.39	33.57	5.05	10	20.39	33.57	5.05	23.59	431.3	0.043
28	17.92	33.48	4.78	20	20.38	33.51	4.88	23.55	435.8	0.087
57	16.08	33.62	4.97	30	17.80	33.48	4.78	24.18	375.9	0.127
85	14.95	33.77	4.92	50	16.50	33.52	4.96	24.52	344.2	0.199
113	12.74	33.69	4.65	75	14.93	33.76	4.96	25.05	293.9	0.279
168	11.86	34.38	0.75	100	13.38	33.75	4.80	25.37	264.2	0.349
222	-	34.54	0.66	150	12.12	34.20	1.00	25.96	208.6	0.466
328	9.13	34.40	0.62	200	(11.30)	34.52	0.65	(26.37)	(171.5)	(0.562)
430	7.92	34.42	0.44	250	(10.45)	34.50	0.65	(26.50)	(159.3)	(0.644)
536	6.92	34.43	0.23	300	(9.62)	34.42	0.63	(26.58)	(152.4)	(0.722)
638	6.13	34.43	0.32	400	8.22	34.41	0.50	26.80	133.0	(0.865)
849	5.00	34.50	0.53	500	7.24	34.43	0.28	26.96	118.7	(0.991)
1035	4.11	34.58	0.56	600	6.40	34.43	0.25	27.07	108.4	(1.104)
1217	3.57	34.54	-	700	5.75	34.44	0.39	27.16	100.2	(1.209)
				800	5.23	34.47	0.51	27.25	92.4	(1.305)
				1000	4.26	34.57	0.55	27.44	74.9	(1.472)

127.60 PAOLINA-T; September 9, 1950; 0803 GCT; 26°03.5'N, 115°46.5'W; sounding, 2,050 fm; wind, 320°, force 5; weather, partly cloudy; sea, rough; wire angle, 20°.

0	20.54	4.99	0	20.54	4.99
9	20.53	5.01	10	20.53	5.03
24	19.92	5.16	20	20.53	5.12
52	15.85	5.72	30	18.60	5.28
75	14.73	5.85	50	16.05	5.68
103	13.66	5.26	75	14.73	5.85
154	10.97	3.52	100	13.75	5.40
205	11.16	0.96	150	10.98	3.77
306	9.94	0.28	200	11.15	1.04
413	8.85	0.20	250	10.70	0.52
515	7.40	-	300	10.00	0.29
617	6.25	0.23	400	9.02	0.20
823	5.02	0.30	500	7.60	0.21
1033	4.16	0.57	600	6.41	0.23
1236	3.57	0.65	700	5.65	0.26
			800	5.13	0.29
			1000	4.28	0.52

E Evaporation (see page 311).

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

PAOLINA-T; September 11, 1950; 2023 GCT; 26°19'N, 113°48.5'W; sounding, 260 fm; wind, 270°, force 3; weather, haze; sea, moderate; wire angle, 5°. 130.35

0	20.33	34.38E	4.54	0	20.33	34.38	4.54	24.22	371.0	0.000	
10	20.02	34.33	4.19	10	20.02	34.33	4.19	24.27	366.4	0.037	
25	18.28	34.33	4.26	20	19.15	34.33	4.26	24.49	345.8	0.073	
50	13.81	34.20	1.41	30	17.85	34.33	4.24	24.82	315.2	0.106	
74	10.18	33.75	3.33	50	13.81	34.20	1.41	25.64	237.1	0.161	
99	12.49 a)	34.54	0.51	75	10.18	33.75	3.33	25.96	206.5	0.216	
153	11.99	34.72	0.06	100	12.49	34.54	0.50	26.16	189.1	0.266	
203	11.41	34.72	0.41	150	12.03	34.72	0.06	26.38	168.8	0.355	
253	10.86	34.62	0.18	200	11.45	34.72	0.40	26.49	159.5	0.437	
302	10.31	34.63	0.16	250	10.89	34.62	0.19	26.52	158.1	0.517	
357	8.88	34.44	0.54	300	10.38	34.63	0.16	26.62	149.7	0.593	
407	8.48	34.52	0.13	400	8.52	34.51	0.15	26.83	130.2	0.733	

PAOLINA-T; September 12, 1950; 0000 GCT; 26°07'N, 114°11'W; sounding, 1,400 fm; wind, 320°, force 4; weather, haze; sea, slight; wire angle, 33°. 130.40

0	18.71	33.55E	4.68	0	18.71	33.55	4.68	24.01	391.2	0.000	
9	18.59	33.53	4.78	10	18.57	33.53	4.80	24.03	389.7	0.039	
21	16.88	33.57	4.85	20	17.00	33.57	4.85	24.44	350.8	0.076	
42	15.65	33.60	4.67	30	16.32	33.58	4.80	24.60	335.3	0.110	
62	13.13	33.42	4.43	50	14.60	33.53	4.58	24.95	303.2	0.174	
82	12.54	33.72	4.23	75	12.75	33.70	4.29	25.46	255.2	0.244	
124	10.30	33.82	2.64	100	11.70	33.77	3.73	25.71	231.4	0.305	
162	9.63	34.09	2.00	150	9.75	34.00	2.20	26.23	182.4	0.409	
238	9.60	34.38	0.84	200	9.62	34.25	1.24	26.45	162.9	0.494	
319	8.86	34.45	0.52	250	9.55	34.41	0.77	26.59	151.0	0.573	
398	7.83	34.40	0.34	300	9.10	34.45	0.56	26.69	141.8	0.646	
483	6.68	34.36	0.33	400	7.80	34.40	0.34	26.85	127.5	0.781	
655	-	34.43	0.25	500	(6.58)	34.36	0.33	(26.99)	(114.6)	(0.902)	
833	4.75	34.49	0.33	600	(6.02)	34.40	0.28	(27.10)	(105.5)	(1.012)	
1031	4.00	34.49	0.54	700	(5.45)	34.45	0.27	(27.21)	(95.6)	(1.113)	
				800	(4.91)	34.48	0.32	(27.30)	(87.6)	(1.204)	
				1000	4.08	34.49	0.52	27.39	78.6	(1.370)	

PAOLINA-T; September 12, 1950; 0606 GCT; 25°47'N, 114°55'W; sounding, 2,100 fm; wind, 320°, force 5; weather, haze; sea, rough; wire angle, 10°. 130.50

0	19.87	33.57E	4.83	0	19.87	33.57	4.83	23.73	418.0	0.000	
10	19.87	33.57	4.61	10	19.87	33.57	4.61	23.73	418.3	0.042	
25	19.62	33.57	4.76	20	19.75	33.57	4.67	23.76	415.7	0.083	
54	15.99	33.54	5.17	30	18.75	33.57	4.85	24.01	391.7	0.124	
78	13.80	33.51	5.21	50	16.47	33.54	5.14	24.54	342.1	0.197	
107	12.19	33.64	4.49	75	14.10	33.51	5.20	25.04	295.3	0.277	
159	11.18	34.16	1.46	100	12.43	33.60	4.93	25.44	257.2	0.346	
210	-	34.33	1.24	150	11.31	34.08	1.52	26.02	202.9	0.461	
311	9.36	34.49	0.56	200	(10.61)	34.30	1.28	(26.32)	(175.6)	(0.556)	
416	8.27	34.51	0.34	250	(10.02)	34.41	1.00	(26.51)	(158.7)	(0.639)	
517	7.00	34.43	0.28	300	(9.45)	34.48	0.64	(26.66)	(145.2)	(0.716)	
618	6.37	34.52	0.25	400	8.45	34.51	0.35	26.84	129.1	(0.852)	
820	-	34.49	0.37	500	7.20	34.43	0.30	26.96	118.2	(0.976)	
1029	4.14	34.50	0.51	600	6.47	34.50	0.27	27.12	104.2	(1.087)	
1232	3.58	34.52	0.71	700	(5.87)	34.52	0.28	(27.21)	(95.9)	(1.187)	
				800	(5.27)	34.50	0.35	(27.27)	(90.7)	(1.280)	
				1000	(4.25)	34.50	0.50	(27.38)	(79.9)	(1.452)	

a) Property structure considered possible for this region.

E Evaporation (see page 311).

S10

CCOFI 5009

OBSERVED					INTERPOLATED					COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg at/L	Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg at/L	σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m
130.60	PAOLINA-T; September 12, 1950; 1232 GCT; 25°27'N, 115°34'W; sounding, 2,100 fm; wind, 320°, force 5; weather, partly cloudy; sea, rough; wire angle, 31°.											
0	19.55	33.60E	4.51		0	19.55	33.60	4.51		23.83	407.9	0.000
9	19.55	33.57	4.61		10	19.55	33.57	4.61		23.81	410.4	0.041
22	19.50	33.58	4.61		20	19.51	33.58	4.62		23.83	409.0	0.082
47	14.92	33.31	5.04		30	18.65	33.57	4.71		24.04	389.3	0.122
69	12.81	33.44	4.73		50	14.45	33.31	5.03		24.81	316.3	0.192
94	11.65	33.64a)	3.95		75	12.17	33.50	4.55		25.41	259.1	0.264
142	-	34.49	0.41		100	11.65	33.68	3.62		25.65	237.1	0.326
188	12.22	34.61	0.47		150	12.01	34.53	0.40		26.24	182.4	0.432
283	10.58	34.65	0.26		200	12.15	34.63	0.47		26.29	178.9	0.522
381	8.75	34.51	0.38		250	11.21	34.65	0.33		26.48	161.5	0.606
475	7.18	34.36	0.52		300	10.25	34.64	0.27		26.65	146.7	0.684
571	6.56	34.47	0.29		400	8.35	34.46	0.45		26.82	131.3	0.822
766	5.23	34.49	0.27		500	6.97	34.37	0.48		26.95	119.3	0.947
971	4.39	34.54	0.40		600	6.39	34.49	0.29		27.12	103.9	1.060
1174	3.75	34.56	0.55		700	5.69	34.49	0.27		27.21	95.8	1.159
					800	5.07	34.49	0.29		27.28	88.9	1.252
					1000	4.29	34.55	0.42		27.42	76.7	1.417
130.70	PAOLINA-T; September 12, 1950; 1821 GCT; 25°08'N, 116°06'W; sounding, 2,100 fm; wind, 350°, force 3; weather, cloudy; sea, rough; wire angle, 5°.											
0	21.65	33.84E	4.00		0	21.65	33.84	4.00		23.45	443.9	0.000
10	21.63	33.86	4.22		10	21.63	33.86	4.22		23.48	442.3	0.044
25	19.83	33.68	4.76		20	21.50	33.82	4.65		23.48	442.1	0.089
50	14.40	33.42	4.96		30	18.00	33.53	4.83		24.17	376.9	0.129
75	12.43	33.64	4.13		50	14.40	33.42	4.96		24.90	307.2	0.198
99	11.34	33.69	3.06		75	12.43	33.64	4.13		25.47	253.6	0.268
153	-	34.22	1.63		100	11.32	33.69	3.02		25.72	230.6	0.329
201	10.29	34.45	0.85		150	10.72	34.16	1.70		26.19	186.7	0.433
298	8.96	34.47	0.38		200	10.30	34.45	0.87		26.49	159.4	0.519
400	7.75	34.43	0.28		250	9.63	34.48	0.52		26.63	147.1	0.595
497	6.74	34.40	0.35		300	8.93	34.47	0.37		26.73	137.7	0.667
599	6.06	34.43	0.30		400	7.75	34.43	0.28		26.88	124.5	0.798
799	4.89	34.49	0.43		500	6.70	34.40	0.35		27.01	113.3	0.917
996	4.19	34.51	0.58		600	6.05	34.43	0.30		27.12	103.7	1.026
1201	3.58	34.54	0.93		700	5.40	34.47	0.33		27.23	93.5	1.124
					800	4.89	34.49	0.43		27.31	86.6	1.214
					1000	4.17	34.51	0.60		27.40	78.2	1.379
130.80	PAOLINA-T; September 12, 1950; 2355 GCT; 24°48.5'N, 116°40'W; sounding, 2,150 fm; wind, 340°, force 3; weather, cloudy; sea, rough; wire angle, 22°.											
0	22.18	33.91E	3.63		0	22.18	33.91	3.63		23.36	452.9	0.000
9	22.14	33.86	3.48		10	22.14	33.86	3.46		23.33	455.8	0.045
23	21.98	33.86	3.40		20	21.98	33.86	3.40		23.38	451.9	0.091
46	15.31	33.44	4.35		30	21.96	33.85	3.44		23.38	452.4	0.136
70	12.80	33.58	3.94		50	14.60	33.44	4.34		24.88	309.8	0.212
93	11.46	33.66	2.67		75	12.37	33.60	3.78		25.45	255.5	0.283
143	10.78	34.22	1.04		100	11.31	33.69	2.18		25.72	230.4	0.344
188	10.26	34.40	0.70		150	10.70	34.29	0.98		26.30	176.8	0.446
278	9.46	34.45	0.23		200	10.13	34.42	0.61		26.50	158.7	0.529
371	8.25	34.43	0.24		250	9.73	34.45	0.32		26.59	151.0	0.606
461	7.18	34.42	0.19		300	9.18	34.45	0.20		26.68	143.1	0.680
558	6.35	34.42	0.25		400	7.86	34.42	0.22		26.86	126.9	0.815
752	5.08	34.33	0.24		500	6.84	34.42	0.20		27.01	113.8	0.936
945	4.22	34.51	0.47		600	6.04	34.41	0.26		27.10	105.0	1.045
1147	3.70	34.46	0.55		700	5.38	34.35	0.31		27.14	102.1	1.148
					800	4.85	34.35	0.37		27.20	96.5	1.248
					1000	4.03	34.50	0.50		27.41	77.2	1.422

a) Alternate value, 33.69‰, not used in interpolation.

E Evaporation (see page 311).

CREST; October 20, 1950; 0749 GCT; 35°46'N, 122°30.5'W; sounding, 1,800 fm; wind, 320°, force 4; weather, fog; sea, rough; wire angle, 15°. 70.60

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	µg at/L	m	°C	‰	ml/L	µg at/L	g/L	$10^5 cm^3/g$	dyn. m
0	13.81	33.21	5.07		0	13.81	33.21	5.07		24.87	309.3	0.000
10	13.81	33.21	6.05		10	13.81	33.21	6.05		24.87	309.6	0.031
24	12.65	33.18	5.34		20	13.53	33.18	5.72		24.90	306.8	0.062
48	10.45	33.37	4.46		30	11.90	33.19	5.08		25.22	276.0	0.091
71	9.25	33.61	3.74		50	10.30	33.40	4.41		25.67	233.6	0.142
94	8.51	33.72	3.49		75	9.05	33.62	3.66		26.05	198.1	0.196
144	8.08	34.00	3.03		100	8.42	33.76	3.43		26.26	178.8	0.243
190	7.76	34.02	2.34		150	8.07	34.01	2.93		26.51	156.0	0.326
282	6.69	34.05	1.64		200	7.64	34.02	2.23		26.58	150.0	0.403
378	6.08	34.14	0.95		250	7.04	34.03	1.82		26.67	141.7	0.476
470	5.77	34.21	0.56		300	6.53	34.06	1.53		26.76	133.4	0.545
570	5.41	34.27	0.41		400	6.02	34.16	0.81		26.91	120.7	0.671
759	4.60	34.34	0.40		500	5.69	34.22	0.50		27.00	113.3	0.789
947	3.95	34.43	0.62		600	5.27	34.28	0.39		27.10	104.7	0.898
1145	3.51	34.43	0.74		700	4.85	34.32	0.39		27.18	97.6	0.999
					800	4.43	34.36	0.41		27.25	90.6	1.093
					1000	3.80	34.43	0.69		27.38	79.6	1.263

CREST; October 20, 1950; 0325 GCT; 35°27.5'N, 123°16'W; sounding, 2,095 fm; wind, 320°, force 2; weather, partly cloudy; sea, rough; wire angle, 12°. 70.70

0	15.20	33.17	4.64		0	15.20	33.17	4.64		24.54	340.5	0.000
10	15.15	33.35	5.27		10	15.15	33.35	5.27		24.69	326.6	0.033
24	14.62	33.22	5.88		20	14.91	33.23	5.80		24.65	330.7	0.066
48	12.33	33.31	5.03		30	14.10	33.23	5.83		24.82	314.6	0.099
72	10.24	33.35	4.26		50	12.20	33.32	5.00		25.27	272.3	0.157
96	8.59	-	3.99		75	9.96	33.36	4.19		25.70	231.6	0.220
147	8.34	33.75	2.75		100	8.51	33.46	3.95		26.01	202.3	0.274
194	7.50	33.87	2.62		150	8.22	33.76	2.71		26.29	176.7	0.369
287	6.82	34.02	1.69		200	7.42	33.88	2.60		26.50	157.3	0.452
386	5.89	34.05	1.07		250	7.08	33.97	2.13		26.62	146.7	0.529
480	5.20	34.09	0.68		300	6.70	34.03	1.57		26.72	137.8	0.600
579	4.70	34.18	0.49		400	5.77	34.06	1.00		26.86	124.9	0.731
774	4.25	34.34	0.40		500	5.09	34.10	0.62		26.97	114.7	0.851
966	3.85	34.42	0.50		600	4.62	34.20	0.48		27.11	102.7	0.959
1167	3.36	34.49	0.74		700	4.39	34.29	0.42		27.20	94.3	1.058
					800	4.20	34.35	0.40		27.27	88.6	1.149
					1000	3.76	34.43	0.53		27.38	79.2	1.318

CREST; October 19, 1950; 2257 GCT; 35°08.5'N, 123°55.5'W; sounding, 2,250 fm; wind, 320°, force 3; weather, partly cloudy; sea, rough; wire angle, 11°. 70.80

0	18.46	32.90	4.66		0	18.46	32.90	4.66		23.57	432.5	0.000
10	18.32	32.90	4.78		10	18.32	32.90	4.78		23.61	329.3	0.043
24	18.24	32.90	4.75		20	18.29	32.90	4.77		23.62	429.2	0.086
49	16.84	32.83	4.97		30	17.68	32.90	4.79		23.76	415.3	0.128
73	12.71	32.83	5.59		50	16.82	32.80	4.93		23.89	403.8	0.210
97	10.86	32.83	4.91		75	12.57	32.83	5.58		24.82	315.7	0.300
155	8.64	33.03	4.26		100	10.65	32.83	4.84		25.17	282.5	0.375
249	7.71	33.91	2.29		150	8.77	33.00	4.34		25.61	241.2	0.506
362	6.64	34.05	1.32		200	8.14	33.48	3.07		26.08	197.1	0.615
480	5.89	34.13	0.70		250	7.70	33.91	2.29		26.48	159.8	0.705
590	5.22	34.20	0.41		300	7.18	33.99	1.79		26.62	147.3	0.781
786	4.36	34.33	0.33		400	6.38	34.08	1.09		26.80	131.3	0.921
981	3.84	34.40	0.48		500	5.74	34.14	0.62		26.93	119.8	1.046
1188	3.40	34.49	0.78		600	5.19	34.21	0.41		27.05	108.9	1.161
					700	4.70	34.27	0.32		27.15	99.5	1.265
					800	4.31	34.34	0.33		27.25	90.6	1.360
					1000	3.81	34.41	0.50		27.36	81.2	1.532

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

70.90K-1 CREST; October 11, 1950; 2100, 2115 GCT; 34°51'N, 124°33'W; sounding, 2,400 fm; wind, 160°, force 1; weather, overcast; sea, high; wire angle, 0°, 0°.

0	17.59	33.30	5.69	0	17.59	33.30	5.69	24.09	383.2	0.000
10	16.98	33.30	5.33	10	16.98	33.30	5.33	24.24	369.7	0.038
50	10.16	33.42	4.33	20	16.97	33.31	5.10	24.25	369.1	0.075
75	9.80	33.71	3.14	30	12.07	33.34	4.89	25.31	268.0	0.106
100	9.30	33.86	2.39	50	10.16	33.42	4.33	25.71	229.9	0.156
124	9.02	33.94	1.93	75	9.80	33.71	3.14	25.99	204.0	0.210
153	8.78	33.96	1.84	100	9.30	33.86	2.39	26.20	184.8	0.259
176	8.63	34.02	1.62	150	8.79	33.96	1.85	26.36	170.4	0.348
				200	8.55	34.05	1.58	26.47	161.0	0.431
205	8.50	34.05	1.56	250	8.22	34.08	1.32	26.54	154.7	0.510
259	8.15	34.09	1.28	300	7.93	34.13	1.18	26.62	147.6	0.585
317	7.85	34.14	1.19							

70.90K-2 CREST; October 12, 1950; 0000 GCT; 34°47'N, 124°34'W; sounding, 2,400 fm; wind, 140°, force 1; weather, overcast; sea, high; wire angle, 5°.

0	17.23	33.28	5.50	0	17.23	33.28	5.50	24.16	376.7	0.000
10	16.99	33.26	5.52	10	16.99	33.26	5.52	24.21	372.7	0.038
50	10.01	33.40	4.43	20	16.98	33.28	5.43	24.22	371.5	0.075
75	9.86	33.72	3.23	30	16.15	33.32	5.23	24.44	350.6	0.111
99	9.38	33.82	2.48	50	10.01	33.40	4.43	25.72	228.9	0.169
124	9.12	33.87	2.18	75	9.86	33.72	3.23	26.00	203.4	0.223
153	8.80	33.96	1.80	100	9.36	33.82	2.47	26.16	188.5	0.272
177	8.71	34.02	1.70	150	8.83	33.95	1.83	26.34	171.7	0.362
202	8.58	34.00	1.50	200	8.61	34.00	1.52	26.42	165.6	0.446
249	8.30	34.11	1.35	250	8.29	34.11	1.36	26.55	153.6	0.526
296	8.01	34.13	1.25	300	7.99	34.13	1.22	26.61	148.5	0.601
397	7.48	34.16	0.95	400	7.46	34.16	0.94	26.71	140.2	0.746
491	6.80	34.20	0.75	500	6.74	34.20	0.73	26.85	128.7	0.880
596	5.94	34.23	0.45	600	5.91	34.23	0.43	26.98	116.6	1.003
751	4.92	34.33	0.29	700	5.23	34.30	0.31	27.12	103.9	1.113
1036	4.02	34.36	0.36	800	4.69	34.34	0.28	27.21	95.2	1.213
				1000	4.10	34.36	0.33	27.29	88.4	1.397

70.90K-3 CREST; October 12, 1950; 0300 GCT; 34°52'N, 124°32.5'W; sounding, 2,380 fm; wind, 360°, force 1; weather, overcast; sea, high; wire angle, 2°.

0	17.12	33.25	5.53	0	17.12	33.25	5.53	24.17	376.2	0.000
10	16.81	33.27	5.49	10	16.81	33.27	5.49	24.25	368.1	0.037
50	10.74	33.31	4.87	20	16.81	33.28	5.38	24.26	367.7	0.074
75	9.79	33.50	4.11	30	16.78	33.29	5.25	24.28	366.6	0.111
100	9.52	33.82	2.69	50	10.74	33.31	4.87	25.53	247.2	0.172
124	9.07	33.93	2.24	75	9.79	33.50	4.11	25.84	218.5	0.230
151	8.77	34.01	1.87	100	9.52	33.82	2.69	26.13	191.4	0.282
174	8.62	34.04	1.69	150	8.79	34.01	1.87	26.40	166.7	0.371
203	8.44	34.11	1.44	200	8.46	34.10	1.49	26.52	155.9	0.451
257	8.10	34.13	1.25	250	8.13	34.13	1.27	26.59	149.7	0.528
316	7.80	34.19	1.07	300	7.87	34.17	1.11	26.66	143.8	0.601

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
CREST; October 12, 1950; 0600 GCT; 34°50'N, 124°32'W; sounding, 2,360 fm; wind, calm; weather, overcast; sea, high; wire angle, 0°.													70.90K-4
0	17.11	33.22	5.38		0	17.11	33.22	5.38		24.14	378.2	0.000	
10	16.73	33.24	5.24		10	16.73	33.24	5.24		24.25	368.5	0.037	
50	10.47	33.42	4.67		20	16.68	33.27	5.13		24.28	365.5	0.074	
75	9.65	33.78	2.88		30	16.63	33.31	4.99		24.33	361.8	0.110	
100	9.28	33.87	2.43		50	10.47	33.42	4.67		25.66	235.1	0.170	
124	8.96	33.95	1.94		75	9.65	33.78	2.88		26.08	195.6	0.224	
153	8.73	34.04	1.84		100	9.28	33.87	2.43		26.21	183.4	0.271	
177	8.64	34.00	1.63		150	8.74	34.03	1.84		26.42	164.4	0.358	
206	8.40	34.05	1.37		200	8.47	34.04	1.42		26.47	160.5	0.439	
258	8.00	34.13	1.24		250	8.06	34.12	1.27		26.60	149.4	0.517	
317	7.70	34.14	1.12		300	7.78	34.14	1.17		26.65	144.7	0.590	
CREST; October 12, 1950; 0900 GCT; 34°53'N, 124°30'W; sounding, 2,380 fm; wind, variable, force 1; weather, overcast; sea, missing; wire angle, 0°.													70.90K-5
0	16.55	33.19	5.53		0	16.55	33.19	5.53		24.25	367.9	0.000	
10	16.48	33.15	5.39		10	16.48	33.15	5.39		24.24	369.6	0.037	
50	10.29	33.40	4.39		20	16.47	33.18	5.15		24.26	367.5	0.074	
75	9.62	33.74	2.89		30	16.20	33.23	4.89		24.36	358.2	0.110	
99	9.21	33.86	2.35		50	10.29	33.40	4.39		25.68	233.5	0.169	
123	8.92	33.95	2.04		75	9.62	33.74	2.89		26.05	198.2	0.223	
152	8.72	33.96	1.82		100	9.19	33.86	2.32		26.22	182.9	0.271	
176	8.58	34.02	1.59		150	8.73	33.96	1.85		26.37	169.5	0.359	
205	8.40	34.05	1.41		200	8.44	34.05	1.44		26.48	159.3	0.441	
258	8.11	34.07	1.29		250	8.18	34.07	1.30		26.54	154.9	0.520	
316	7.74	34.14	1.08		300	7.83	34.12	1.13		26.63	146.9	0.595	
CREST; October 12, 1950; 1200 GCT; 34°53'N, 124°30'W; sounding, 2,380 fm; wind, 360°, force 1; weather, overcast; sea, missing; wire angle, 5°.													70.90K-6
0	16.84	33.22	5.66		0	16.84	33.22	5.66		24.21	372.4	0.000	
5	16.61	33.21	5.39		10	16.59	33.22	5.21		24.27	366.9	0.037	
15	14.43	33.24	5.08		20	12.10	33.26	4.97		25.24	274.2	0.069	
55	10.04	33.61	3.07		30	10.82	33.33	4.56		25.53	247.0	0.095	
80	9.45	33.78	2.65		50	10.20	33.53	3.24		25.79	222.4	0.142	
104	9.17	33.86	2.14		75	9.55	33.76	2.71		26.08	195.5	0.194	
128	8.93	33.93	2.04		100	9.22	33.85	2.19		26.20	184.2	0.242	
157	8.78	34.01	1.76		150	8.81	34.00	1.82		26.39	167.7	0.329	
182	8.58	34.02	1.63		200	8.52	34.07	1.47		26.49	159.1	0.412	
206	8.50	34.09	1.40		250	8.22	34.12	1.21		26.57	151.8	0.489	
302	7.88	34.14	1.12		300	7.89	34.14	1.12		26.64	146.3	0.563	
403	7.36	34.22	0.85		400	7.40	34.22	0.87		26.77	135.0	0.704	
500	6.61	34.21	0.64		500	6.61	34.21	0.64		26.87	126.2	0.835	
608	5.79	34.23	0.42		600	5.86	34.23	0.44		26.98	116.0	0.956	
763	4.86	34.32	0.45		700	5.18	34.28	0.42		27.11	104.7	1.066	
1049	3.96	34.38	0.53		800	4.73	34.34	0.47		27.20	95.7	1.166	
					1000	4.10	34.38	0.50		27.30	86.9	1.349	

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	OBSERVED					INTERPOLATED					COMPUTED		
	Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m
70,90K-7	CREST; October 12, 1950; 1500 GCT; 34°52'N, 124°29'W; sounding, 2,360 fm; wind, 320°, force 2; weather, overcast; sea, very rough; wire angle, 0°.												
	0	16.62	33.15	5.40		0	16.62	33.15	5.40		24.21	372.4	0.000
	10	16.44	33.18	4.77		10	16.44	33.18	4.77		24.27	366.8	0.037
	50	10.42	33.39	4.17		20	16.44	33.22	4.53		24.30	363.9	0.074
	76	9.86	33.68	3.06		30	13.75	33.27	4.38		24.92	304.7	0.107
	101	-	33.82	2.35		50	10.42	33.39	4.17		25.65	235.8	0.161
	125	9.02	33.91	2.03		75	9.88	33.67	3.10		25.95	207.4	0.216
	155	8.76	33.98	1.74		100	9.40	33.82	2.37		26.15	189.2	0.266
	177	8.60	34.02	1.55		150	8.80	33.97	1.80		26.36	169.8	0.356
	207	8.46	34.07	1.31		200	8.50	34.06	1.37		26.48	159.5	0.438
	260	8.18	34.09	1.23		250	8.24	23.09	1.24		26.54	154.3	0.517
	319	7.82	34.16	1.08		300	7.94	34.13	1.11		26.62	147.8	0.592
70,90K-8	CREST; October 12, 1950; 1800 GCT; 34°53'N, 124°28'W; sounding, 2,370 fm; wind, 320°, force 2; weather, overcast; sea, rough; wire angle, 7°.												
	0	17.35	33.21	5.06		0	17.35	33.31	5.06		24.16	377.0	0.000
	10	17.16	33.35	4.94		10	17.16	33.35	4.94		24.23	370.1	0.037
	50	11.11	33.22	4.92		20	17.13	33.33	4.92		24.22	371.2	0.074
	74	10.11	33.44	4.27		30	15.00	33.29	4.92		24.67	328.4	0.109
	99	9.45	33.78	2.62		50	11.11	33.22	4.92		25.39	260.3	0.168
	123	9.14	33.84	2.24		75	10.08	33.44	4.15		25.74	227.6	0.229
	153	8.87	33.96	1.89		100	9.45	33.78	2.60		26.11	192.9	0.282
	176	8.72	34.02	1.78		150	8.90	33.94	1.91		26.33	173.5	0.373
	205	8.54	34.02	1.50		200	8.60	34.02	1.55		26.43	164.0	0.457
	259	8.19	34.11	1.32		250	8.25	34.09	1.34		26.54	154.4	0.538
	319	7.84	34.13	1.10		300	7.94	34.13	1.18		26.62	147.8	0.613
70,90K-9	CREST; October 12, 1950; 2100 GCT; 34°55.5'N, 124°26.5'W; sounding, 2,370 fm; wind, 310°, force 1; weather, cloudy; sea, moderate; wire angle, 0°.												
	0	17.45	33.37	5.37		0	17.45	33.37	5.37		24.18	374.9	0.000
	10	17.00	33.31	5.37		10	17.00	33.31	5.37		24.24	369.4	0.037
	50	10.40	33.33	4.61		20	17.00	33.29	5.34		24.22	371.2	0.074
	75	9.67	33.77	2.85		30	16.80	33.30	5.20		24.28	366.3	0.111
	100	9.20	33.91	2.20		50	10.40	33.33	4.61		25.60	240.6	0.172
	124	8.98	33.97	1.94		75	9.67	33.76	2.85		26.06	197.4	0.227
	152	8.75	34.04	1.77		100	9.20	33.91	2.20		26.25	179.6	0.274
	177	8.62	34.04	1.57		150	8.76	34.04	1.78		26.43	164.0	0.360
	205	8.41	34.11	1.45		200	8.48	34.10	1.46		26.52	156.2	0.439
	259	8.06	34.14	1.15		250	8.12	34.13	1.20		26.59	149.6	0.516
	317	7.76	34.22	1.04		300	7.84	34.19	1.06		26.68	141.9	0.589

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

CREST; October 13, 1950; 0000 GCT; 34°51'N, 124°38'W; sounding, 2,370 fm; wind, 310°, force 3; weather, cloudy; sea, very rough; wire angle, 0°. 70.90K-10

0	17.49	33.35	3.53	0	17.49	33.35	3.53	24.15	377.5	0.000
10	17.04	33.34	3.05	10	17.04	33.34	3.05	24.25	368.2	0.037
50	10.26	33.55	3.07	20	17.03	33.37	3.02	24.28	266.1	0.074
75	9.54	33.80	1.91	30	15.43	33.41	3.03	24.67	328.6	0.109
100	9.16	33.91	1.71	50	10.26	33.55	3.07	25.80	221.9	0.164
124	8.96	33.96	1.55	75	9.54	33.80	1.91	26.11	192.5	0.216
154	8.76	34.04	1.50	100	9.16	33.91	1.71	26.26	178.9	0.262
178	8.56	34.06	1.35	150	8.79	34.03	1.50	26.41	165.2	0.348
202	8.42	34.09	1.05	200	8.47	34.09	1.05	26.51	156.8	0.429
252	8.16	34.09	1.04	250	8.19	34.09	1.04	26.55	153.6	0.506
301	7.92	34.20	0.98	300	7.94	34.20	0.99	26.68	142.6	0.580
402	7.42	34.23	0.72	400	7.45	34.23	0.74	26.77	134.9	0.719
498	6.66	34.25	0.58	500	6.65	34.25	0.56	26.90	123.7	0.848
605	5.96	34.29	0.38	600	6.00	34.29	0.37	27.01	113.4	0.966
760	4.92	34.36	0.28	700	5.23	34.33	0.30	27.14	101.6	1.074
1047	3.98	34.43	0.44	800	4.78	34.37	0.29	27.22	94.1	1.172
				1000	4.10	34.42	0.40	27.34	84.0	1.350

CREST; October 13, 1950; 0300 GCT; 34°50.5'N, 124°40'W; sounding, 2,370 fm; wind, 320°, force 4; weather, cloudy; sea, very rough; wire angle, 0°. 70.90K-11

0	17.21	33.35	5.31	0	17.21	33.35	5.31	24.22	370.7	0.000
10	17.07	33.32	5.70	10	17.07	33.32	5.70	24.23	370.1	0.037
50	10.24	33.57	3.91	20	17.06	33.37	5.57	24.27	366.7	0.074
76	9.58	33.78	2.66	30	17.00	33.44	5.03	24.34	360.6	0.110
101	9.21	33.89	2.19	50	10.24	33.57	3.91	25.82	220.1	0.168
125	9.04	33.91	2.09	75	9.60	33.77	2.70	26.08	195.5	0.220
155	8.91	33.93	1.90	100	9.22	33.89	2.19	26.24	181.2	0.267
177	8.76	34.00	1.72	150	8.94	33.93	1.94	26.31	174.9	0.356
207	8.52	34.05	1.51	200	8.59	34.04	1.56	26.45	162.3	0.440
259	8.23	34.09	1.35	250	8.29	34.08	1.38	26.53	155.8	0.520
318	7.90	34.11	1.11	300	8.00	34.10	1.21	26.59	150.9	0.597

CREST; October 13, 1950; 0600 GCT; 34°52.5'N, 124°32'W; sounding, 2,370 fm; wind, 320°, force 3; weather, partly cloudy; sea, very rough; wire angle, 0°. 70.90K-12

0	16.45	33.13	5.43	0	16.45	33.13	5.43	24.23	370.1	0.000
10	16.44	33.19	5.33	10	16.44	33.19	5.33	24.28	365.6	0.037
50	10.31	33.44	4.42	20	16.42	33.25	5.16	24.33	361.3	0.073
75	9.64	33.75	2.87	30	12.40	33.31	4.94	25.22	276.3	0.105
99	9.25	33.86	2.37	50	10.31	33.44	4.42	25.70	230.7	0.156
123	9.02	33.89	2.05	75	9.64	33.75	2.87	26.06	197.8	0.209
152	8.80	33.98	1.82	100	9.23	33.86	2.33	26.21	183.6	0.257
176	8.70	34.00	1.81	150	8.82	33.98	1.82	26.37	169.3	0.345
204	8.52	34.00	1.48	200	8.58	34.00	1.52	26.42	165.1	0.429
257	8.27	34.07	1.36	250	8.30	34.06	1.39	26.51	157.4	0.509
318	7.86	34.11	1.04	300	7.99	34.11	1.18	26.60	150.0	0.586

CREST; October 13, 1950; 0900 GCT; 34°51'N, 124°28.5'W; sounding, 2,350 fm; wind, 320°, force 3; weather; overcast; sea, missing; wire angle, 2°. 70.90K-13

0	16.30	33.17	5.41	0	16.30	33.17	5.41	24.29	363.9	0.000
10	16.24	33.17	5.35	10	16.24	33.17	5.35	24.31	363.1	0.036
50	10.14	33.40	4.40	20	16.22	33.20	5.20	24.34	360.6	0.073
75	9.81	33.69	3.15	30	11.80	33.24	4.99	25.28	270.6	0.104
100	9.37	33.84	2.53	50	10.14	33.40	4.40	25.70	231.4	0.154
124	9.04	33.91	2.13	75	9.81	33.69	3.15	25.98	204.8	0.209
153	8.73	34.02	1.77	100	9.37	33.84	2.53	26.17	187.4	0.258
177	8.58	34.09	1.56	150	8.76	34.01	1.80	26.40	166.2	0.346
206	8.40	34.11	1.46	200	8.48	34.11	1.50	26.52	155.5	0.427
258	8.09	34.13	1.16	250	8.13	34.12	1.22	26.58	150.5	0.503
319	7.78	34.16	1.11	300	7.89	34.15	1.12	26.64	145.6	0.577

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

70.90K-14 CREST; October 13, 1950; 1200 GCT; 34°56.5'N, 124°25.5'W; sounding, 2,380 fm; wind, 320°, force 4; weather, overcast; sea, missing; wire angle, 10°.

0	16.04	33.10	4.12	0	16.04	33.10	4.12	24.30	363.4	0.000
10	16.04	33.08	4.47	10	16.04	33.08	4.47	24.28	365.2	0.036
54	9.92	33.13	3.98	20	16.02	33.08	4.44	24.29	365.0	0.073
79	9.90	33.53	2.77	30	13.50	33.09	4.34	24.84	313.1	0.107
108	9.32	33.76	1.66	50	9.05a)	32.87	4.03	25.46	253.5	0.164
132	9.00	33.86	1.47	75	9.99	33.47	3.04	25.78	223.9	0.223
161	8.73	33.90	1.34	100	9.48	33.71	1.82	26.05	198.6	0.276
190	8.54	34.00	1.12	150	8.83	33.89	1.38	26.30	176.2	0.370
214	8.38	34.00	1.15	200	8.49	34.00	1.14	26.44	163.8	0.455
265	8.08	34.09	1.01	250	8.17	34.06	1.08	26.53	155.5	0.535
317	7.84	34.13	0.87	300	7.93	34.12	0.90	26.61	148.4	0.611
426	7.01	34.14	0.79	400	7.20	34.14	0.80	26.74	138.0	0.754
530	6.28	34.20	0.52	500	6.50	34.18	0.61	26.86	126.9	0.886
636	5.63	34.25	0.33	600	5.84	34.23	0.39	26.99	115.9	1.008
802	4.66	34.33	0.32	700	5.23	34.28	0.31	27.10	105.3	1.118
1106	3.78	34.43	0.55	800	4.68	34.33	0.32	27.20	95.8	1.218
				1000	3.97	34.40	0.43	27.33	83.9	1.397

70.90K-15 CREST; October 13, 1950; 1500 GCT; 34°50'N, 124°25'W; sounding, 2,360 fm; wind, 320°, force 3; weather, overcast; sea, very rough; wire angle, 5°.

0	16.22	33.17	5.46	0	16.22	33.17	5.46	24.31	362.2	0.000
10	16.22	33.17	3.77r	10	16.22	33.17	(5.40)	24.31	362.5	0.036
50	9.21	32.99	3.64	20	16.21	33.14	(5.25)	24.29	364.7	0.073
75	9.99	33.51	2.71	30	13.00	33.10	(4.90)	24.94	302.8	0.106
100	9.54	33.80	2.46	50	9.21	32.99	3.64	25.54	246.6	0.161
124	9.11	33.91	1.38r	75	9.99	33.51	2.71	25.82	220.2	0.219
154	8.82	33.98	1.79	100	9.54	33.80	2.46	26.11	193.0	0.271
178	8.64	34.02	1.66	150	8.87	33.97	1.82	26.35	170.8	0.362
207	8.43	34.07	1.44	200	8.50	34.06	1.50	26.48	159.5	0.444
262	8.18	34.13	1.22	250	8.23	34.12	1.26	26.57	151.9	0.522
321	7.86	34.16	1.08	300	7.96	34.15	1.12	26.63	146.6	0.597

70.90K-16 CREST; October 13, 1950; 1800 GCT; 34°54.5'N, 124°29.5'W; sounding, 2,360 fm; wind, 320°, force 3; weather, overcast; sea, very rough; wire angle, 0°.

0	16.85	33.13	5.47	0	16.85	33.13	5.47	24.13	379.2	0.000
10	16.98	33.31	5.51	10	16.98	33.31	5.51	24.24	369.2	0.037
50	9.76	32.92	5.43	20	16.99	33.29	5.53	24.23	371.0	0.074
75	10.06	33.40	4.35	30	16.98	33.16	5.52	24.13	380.5	0.112
100	9.76	33.69	3.18	50	9.76	32.92	5.43	25.39	260.5	0.176
124	9.19	33.84	2.38	75	10.06	33.40	4.35	25.71	230.2	0.237
153	8.84	33.95	1.94	100	9.76	33.69	3.18	26.00	203.7	0.292
177	8.64	33.96	1.63	150	8.88	33.95	1.98	26.34	172.5	0.386
206	8.47	34.02	1.44	200	8.51	34.01	1.48	26.44	163.4	0.469
259	8.16	34.10	1.39	250	8.21	34.09	1.39	26.55	153.9	0.549
320	7.88	34.11	1.12	300	7.97	34.11	1.26	26.60	149.7	0.625

70.90K-17 CREST; October 13, 1950; 2100 GCT; 34°56.5'N, 124°28'W; sounding, 2,360 fm; wind, 320°, force 4; weather, overcast; sea, very rough; wire angle, 5°.

0	16.54	33.06	5.54	0	16.54	33.06	5.54	24.15	377.2	0.000
10	16.61	33.15	5.38	10	16.61	33.15	5.38	24.21	372.7	0.037
50	10.53	33.32	4.61	20	15.20	33.22	5.17	24.58	337.4	0.073
75	9.89	33.64	3.39	30	10.40	33.27	4.96	25.56	244.5	0.102
100	9.35	33.78	2.40	50	10.53	33.32	4.61	25.57	243.5	0.151
124	9.01	33.86	2.08	75	9.89	33.64	3.39	25.93	209.9	0.208
153	8.72	33.93	1.74	100	9.35	33.78	2.40	26.13	191.3	0.258
177	8.60	33.96	1.61	150	8.76	33.92	1.79	26.33	172.9	0.349
206	8.43	34.00	1.46	200	8.49	33.99	1.50	26.43	164.5	0.433
259	8.18	34.05	1.20	250	8.23	34.04	1.26	26.51	157.8	0.514
318	7.84	34.28	1.07	300	7.90	34.19	1.09	26.67	142.8	0.589

a) Bathythermograph feature is incorporated in the temperature and salinity curve.

CREST; October 14, 1950; 0000 GCT; 34°53.5'N, 124°27'W; sounding, 2,360 fm; wind, 320°, force 4; weather, overcast; sea, very rough; wire angle, 14°. 70.90K-18

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
0	16.22	33.15	5.16		0	16.22	33.15	5.16		24.30	363.4	0.000
10	16.15	33.17	4.79		10	16.15	33.17	4.79		24.33	361.0	0.036
53	10.28r	-	4.53		20	(16.03)	(33.20)	4.68		(24.38)	(356.5)	(0.072)
78	9.67	33.75	2.85		30	(15.89)	(33.25)	4.64		(24.45)	(350.1)	(0.107)
106	9.09	33.89	2.13		50	(9.57)	(33.43)	4.56		(25.82)	(219.7)	(0.164)
131	8.82	33.93	1.90		75	(9.85)	(33.72)	3.07		(26.00)	(203.2)	(0.217)
159	8.62	34.04	1.69		100	9.17	33.87	2.25		26.23	181.9	(0.265)
188	8.46	34.05	1.39		150	8.69	34.01	1.77		26.41	165.2	(0.352)
212	8.32	34.05	1.33		200	8.40	34.05	1.35		26.49	158.8	(0.433)
265	8.04	34.11	1.24		250	8.13	34.09	1.28		26.56	152.7	(0.511)
317	7.76	34.13	1.05		300	7.84	34.13	1.12		26.64	146.3	(0.585)
427	7.19	34.18	0.82		400	7.39	34.17	0.87		26.73	138.5	(0.728)
532	6.29	34.20	0.59		500	6.51	34.20	0.68		26.88	125.5	(0.860)
638	5.66	34.29	0.35		600	5.90	34.25	0.42		26.99	115.0	(0.980)
807	4.64	34.36	0.30		700	5.23	34.33	0.30		27.14	101.6	(1.089)
1109	3.77	34.40	0.61		800	4.68	34.36	0.29		27.23	93.6	(1.186)
					1000	3.94	34.38	0.61		27.32	85.0	(1.365)

CREST; October 14, 1950; 0300 GCT; 34°54'N, 124°28'W; sounding, 2,350 fm; wind, 320°, force 4; weather, overcast; sea, very rough; wire angle, 3°. 70.90K-19

0	16.34	33.12	5.12		0	16.34	33.12	5.12		24.25	368.4	0.000
10	16.25	33.12	5.46		10	16.25	33.12	5.46		24.27	366.8	0.037
50	10.13	33.44	4.12		20	16.08	33.15	5.34		24.33	361.2	0.073
75	9.68	33.82	2.89		30	11.30	33.21	4.97		25.35	264.0	0.104
100	9.31	33.80	2.35		50	10.13	33.44	4.12		25.73	227.9	0.154
124	9.09	33.89	2.10		75	9.68	33.82	2.89		26.10	193.3	0.206
154	8.82	33.95	1.80		100	9.31	33.80	2.35		26.15	189.2	0.254
179	8.68	33.98	1.64		150	8.87	33.95	1.85		26.34	172.3	0.344
210	8.48	34.05	1.50		200	8.54	34.02	1.56		26.44	163.1	0.429
263	8.18	34.07	1.28		250	8.29	34.07	1.34		26.52	156.5	0.508
322	7.80	34.14	1.05		300	7.92	34.11	1.16		26.61	149.0	0.584

CREST; October 14, 1950; 0600 GCT; 34°51'N, 124°27'W; sounding, 2,360 fm; wind, 320°, force 4; weather, overcast; sea, very rough; wire angle, 7°. 70.90K-20

0	16.11	33.12	5.51		0	16.11	33.12	5.51		24.30	363.2	0.000
10	16.10	33.15	5.45		10	16.10	33.15	5.45		24.32	361.3	0.036
50	9.55	33.08	4.95		20	16.00	33.14	5.38		24.34	360.2	0.072
74	9.83	33.84	3.12		30	10.13	33.12	5.27		25.48	251.3	0.103
99	9.27	33.82	2.38		50	9.55	33.08	4.95		25.55	245.3	0.153
123	9.06	33.87	2.18		75	9.85	33.84	3.08		26.09	194.3	0.208
152	8.83	33.95	1.78		100	9.26	33.82	2.38		26.17	187.0	0.255
175	8.72	33.96	1.66		150	8.87	33.95	1.79		26.34	172.3	0.345
203	8.54	34.04	1.50		200	8.59	34.03	1.52		26.44	163.1	0.429
257	8.28	34.09	1.35		250	8.31	34.08	1.36		26.53	156.1	0.509
315	7.88	34.14	1.05		300	8.00	34.12	1.16		26.60	149.4	0.585

CREST; October 14, 1950; 0900 GCT; 34°55'N, 124°31.5'W; sounding, 2,350 fm; wind, 320°, force 4; weather, partly cloudy; sea, missing; wire angle, 0°. 70.90K-21

0	16.83	33.15	5.04		0	16.83	33.15	5.04		24.15	377.2	0.000
10	16.82	33.13	5.33		10	16.82	33.13	5.33		24.14	378.8	0.038
50	10.23	33.28	4.43		20	16.82	33.15	5.28		24.16	377.4	0.076
75	9.81	33.66	2.95		30	11.50	33.18	5.10		25.29	269.7	0.108
100	9.38	33.77	2.42		50	10.23	33.28	4.43		25.59	241.4	0.159
125	9.12	33.84	2.13		75	9.81	33.66	2.95		25.96	207.0	0.215
154	8.82	33.91	1.76		100	9.38	33.77	2.42		26.11	192.7	0.265
179	8.68	33.95	1.61		150	8.87	33.90	1.82		26.30	176.0	0.357
207	8.54	34.00	1.49		200	8.57	33.99	1.53		26.42	165.7	0.442
259	8.18	34.05	1.26		250	8.23	34.04	1.30		26.51	157.8	0.524
318	7.92	34.13	1.15		300	8.00	34.10	1.18		26.59	150.9	0.601

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OBSERVED					INTERPOLATED					COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m
70.90K-22	CREST; October 14, 1950; 1200 GCT; 34°53'N, 124°32'W; sounding, 2,350 fm; wind, 320°, force 5; weather, overcast; sea, rough; wire angle, 7°.											
0	16.32	33.11	5.35		0	16.32	33.11	5.35		24.25	368.5	0.000
10	16.30	33.08	5.23		10	16.30	33.08	5.23		24.22	370.8	0.037
50	10.67	33.33	4.77		20	16.11	33.10	5.13		24.28	365.5	0.074
74	9.70	33.75	2.83		30	13.70	33.14	5.02		24.83	313.3	0.108
124	9.00	33.93	1.97		50	10.67	33.33	4.77		25.57	243.8	0.163
153	8.80	34.00	1.74		75	9.70	33.76	2.80		26.06	197.9	0.219
177	8.66	34.04	1.62		100	9.28	33.86	2.27		26.20	184.3	0.266
202	8.54	34.05	1.61		150	8.81	33.99	1.78		26.38	168.5	0.355
250	8.22	34.09	1.33		200	8.57	34.05	1.60		26.46	161.3	0.437
298	7.99	34.14	1.22		250	8.22	34.09	1.33		26.55	154.0	0.516
399	7.49	34.19	1.00		300	7.99	34.14	1.23		26.62	147.8	0.591
494	6.73	34.18	0.71		400	7.50	34.19	1.00		26.73	138.6	0.734
600	5.86	34.23	0.37		500	6.69	34.18	0.69		26.84	129.5	0.868
754	4.88	34.30	0.42		600	5.86	34.23	0.37		26.98	115.8	0.991
1036	3.98	34.40	0.59		700	5.18	34.27	0.38		27.10	105.4	1.102
					800	4.68	34.32	0.47		27.19	96.6	1.203
					1000	4.03	34.39	0.54		27.32	85.3	1.385
70.90K-23	CREST; October 14, 1950; 1500 GCT; 34°52'N, 124°28.5'W; sounding, 2,350 fm; wind, 320°, force 4; weather, overcast; sea, very rough; wire angle, 10°.											
0	16.02	33.13	5.45		0	16.02	33.13	5.45		24.32	361.0	0.000
10	16.03	33.17	5.40		10	16.03	33.17	5.40		24.35	258.6	0.036
50	9.73	33.08	4.89		20	16.05	33.16	5.32		24.34	359.8	0.072
76	9.84	33.73	3.10		30	12.42	33.13	5.20		25.08	289.9	0.104
99	9.47	33.80	2.50		50	9.73	33.08	4.89		25.52	248.5	0.158
124	9.11	33.89	2.13		75	9.86	33.73	3.14		26.00	202.6	0.215
153	8.82	33.96	1.84		100	9.46	33.80	2.49		26.13	191.6	0.264
176	8.68	34.04	1.68		150	8.87	33.95	1.88		26.34	172.3	0.355
204	8.54	34.04	1.55		200	8.53	34.04	1.58		26.46	161.4	0.438
258	8.19	34.13	1.32		250	8.23	34.12	1.38		26.57	151.9	0.517
317	7.84	34.14	1.12		300	7.96	34.14	1.19		26.63	147.3	0.591
70.90K-24	CREST; October 14, 1950; 1800 GCT; 34°54'N, 124°30'W; sounding, 2,360 fm; wind, 320°, force 4; weather, overcast; sea, very rough; wire angle, 0°.											
0	16.61	33.17	5.35		0	16.61	33.17	5.35		24.22	370.7	0.000
10	16.59	33.21	5.33		10	16.59	33.21	5.33		24.26	367.9	0.037
50	10.50	33.31	4.54		20	16.60	33.24	5.25		24.28	366.0	0.074
75	10.03	33.64	3.45		30	12.10	33.26	5.12		25.24	274.5	0.106
100	9.47	33.80	2.51		50	10.50	33.31	4.54		25.57	243.7	0.157
124	9.15	33.87	2.16		75	10.03	33.64	3.45		25.90	212.3	0.214
153	8.86	33.98	1.84		100	9.47	33.80	2.51		26.12	191.8	0.265
176	8.72	33.98	1.67		150	8.88	33.98	1.88		26.36	170.3	0.355
206	8.47	34.05	1.44		200	8.52	34.03	1.50		26.45	162.0	0.438
260	8.16	34.11	1.27		250	8.21	34.10	1.30		26.56	153.1	0.517
319	7.76	34.22	1.06		300	7.90	34.18	1.12		26.67	143.5	0.591
70.90K-25	CREST; October 14, 1950; 2110 GCT; 34°53'N, 124°31'W; sounding, 2,360 fm; wind, 320°, force 3; weather, overcast; sea, missing; wire angle, 2°.											
0	16.56	33.17	5.41		0	16.56	33.17	5.41		24.24	369.4	0.000
10	16.25	33.15	5.39		10	16.25	33.15	5.39		24.29	364.6	0.037
50	10.53	33.33	4.66		20	16.07	33.16	5.30		24.34	360.2	0.073
75	9.80	33.71	3.11		30	11.80	33.20	5.16		25.25	273.5	0.105
100	9.38	33.80	2.46		50	10.53	33.33	4.66		25.57	243.1	0.156
125	9.06	33.91	2.06		75	9.80	33.71	3.11		26.00	203.1	0.212
153	8.82	33.98	1.81		100	9.38	33.80	2.46		26.14	190.3	0.261
178	8.69	34.02	1.63		150	8.86	33.97	1.84		26.35	170.7	0.351
207	8.55	34.07	1.55		200	8.58	34.06	1.57		26.47	160.7	0.434
261	8.26	34.14	1.35		250	8.31	34.13	1.39		26.57	152.4	0.513
320	7.86	34.14	1.07		300	7.99	34.14	1.17		26.62	147.8	0.587

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
CREST; October 15, 1950; 0000 GCT; 34°55.5'N, 124°26'W; sounding, 2,360 fm; wind, 320°, force 3, weather, cloudy; sea, missing; wire angle, 0°.													70.90K-26
0	16.33	33.12	5.27		0	16.33	33.12	5.27		24.25	368.4	0.000	
10	16.02	33.13	5.53		10	16.02	33.13	5.53		24.32	361.3	0.036	
50	10.28	33.37	4.59		20	15.00	33.17	5.47		24.58	336.9	0.071	
75	9.63	33.78	2.95		30	10.40	33.22	5.28		25.52	248.2	0.101	
100	9.14	33.86	2.15		50	10.28	33.37	4.59		25.65	235.5	0.149	
126	8.93	33.93	1.93		75	9.63	33.78	2.95		26.08	195.4	0.203	
155	8.74	33.98	1.73		100	9.14	33.86	2.15		26.22	182.3	0.250	
178	8.60	34.00	1.56		150	8.78	33.97	1.78		26.37	169.5	0.338	
204	8.47	34.04	1.49		200	8.51	34.03	1.49		26.46	161.9	0.421	
254	8.19	34.11	1.33		250	8.22	34.10	1.34		26.56	153.3	0.500	
302	7.94	34.13	1.16		300	7.95	34.13	1.17		26.62	147.9	0.575	
403	7.51	34.18	0.95		400	7.53	34.18	0.96		26.72	139.8	0.719	
500	6.71	34.20	0.73		500	6.71	34.20	0.73		26.85	128.4	0.853	
607	5.96	34.23	0.51		600	6.02	34.23	0.53		26.96	118.1	0.976	
765	4.83	34.36	0.34		700	5.26	34.30	0.38		27.11	104.2	1.087	
1048	3.94	34.43	0.55		800	4.63	34.38	0.34		27.25	91.5	1.185	
					1000	4.00	34.43	0.51		27.35	82.0	1.359	
CREST; October 15, 1950; 0300 GCT; 34°50.5'N, 124°33'W; sounding, 2,370 fm; wind, 320°, force 1; weather, partly cloudy; sea, very rough; wire angle, 0°.													70.90K-27
0	16.26	33.17	5.51		0	16.26	33.17	5.51		24.30	363.0	0.000	
10	16.12	33.15	5.27		10	16.12	33.15	5.27		24.32	362.0	0.036	
50	10.21	33.36	4.36		20	14.00	33.17	5.03		24.79	316.7	0.070	
75	9.62	33.78	2.76		30	10.10	33.21	4.80		25.56	244.0	0.098	
100	9.23	33.82	2.30		50	10.21	33.36	4.36		25.66	235.1	0.146	
125	9.00	33.91	1.96		75	9.62	33.78	2.76		26.08	195.3	0.200	
154	8.82	33.95	1.88		100	9.23	33.82	2.30		26.18	186.5	0.248	
177	8.74	33.98	1.70		150	8.85	33.95	1.89		26.34	172.0	0.337	
205	8.52	34.05	1.51		200	8.60	34.03	1.53		26.44	163.2	0.422	
258	8.23	34.11	1.35		250	8.29	34.11	1.39		26.55	153.6	0.500	
317	7.90	34.16	1.12		300	8.02	34.15	1.21		26.62	147.5	0.575	
CREST; October 15, 1950; 0600 GCT; 34°54.5'N, 124°31'W; sounding, 2,360 fm; wind, 320°, force 1; weather, partly cloudy; sea, very rough; wire angle, 0°.													70.90K-28
0	16.15	33.13	5.33		0	16.15	33.13	5.33		24.30	363.6	0.000	
10	16.17	33.10	5.80		10	16.17	33.10	5.80		24.27	366.5	0.037	
50	10.47	33.37	4.76		20	16.17	33.12	5.72		24.29	365.3	0.073	
75	9.96	33.64	3.41		30	10.40	33.18	5.42		25.49	251.1	0.104	
100	9.43	33.78	2.55		50	10.47	33.37	4.76		25.62	238.5	0.153	
125	9.09	33.87	2.12		75	9.96	33.64	3.41		25.92	210.7	0.209	
153	8.85	33.93	1.92		100	9.43	33.78	2.55		26.11	192.8	0.259	
177	8.70	34.00	1.70		150	8.77	33.92	1.93		26.33	173.0	0.351	
205	8.52	34.05	1.54		200	8.59	34.04	1.57		26.45	162.3	0.434	
257	8.21	34.07	1.29		250	8.25	34.07	1.31		26.53	155.9	0.514	
317	7.86	34.14	1.06		300	7.96	34.11	1.12		26.60	149.6	0.590	
CREST; October 15, 1950; 0900, 0918 GCT; 34°52'N, 124°32.5'W; sounding, 2,360 fm; wind, 320°, force 2; weather, overcast; sea, missing; wire angle, 0°, 0°.													70.90K-29
0	16.20	33.12	5.19		0	16.20	33.12	5.19		24.28	365.4	0.000	
10	16.09	33.13	5.19		10	16.09	33.13	5.19		24.31	362.6	0.036	
50	10.29	33.38	4.28		20	14.40	33.17	5.10		24.71	324.7	0.071	
75	10.01	33.64	3.44		30	10.42	33.23	4.94		25.52	247.8	0.099	
100	9.50	33.77	2.46		50	10.29	33.38	4.28		25.66	234.9	0.148	
					75	10.01	33.64	3.44		25.91	211.7	0.203	
125	9.13	33.87	2.13		100	9.50	33.77	2.46		26.10	194.4	0.254	
155	8.91	33.93	1.81		150	8.95	33.92	1.87		26.30	175.8	0.347	
179	8.68	34.02	1.71		200	8.54	34.04	1.58		26.46	161.6	0.432	
207	8.47	34.04	1.51		250	8.20	34.08	1.23		26.54	154.4	0.510	
260	8.14	34.09	1.19		300	7.90	34.15	1.07		26.64	145.7	0.585	
319	7.80	34.17	1.03										

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

70.90K-30 CREST; October 15, 1950; 1200 GCT; 34°54.5'N, 124°29'W; sounding, 2,350 fm; wind, 320°, force 1; weather, overcast; sea, missing; wire angle, 5°.

0	16.22	33.15	5.46	0	16.22	33.15	5.46	24.30	363.6	0.000
10	16.22	33.14	5.36	10	16.22	33.14	5.36	24.29	364.4	0.036
50	10.85	33.23	4.89	20	15.90	33.14	5.23	24.36	358.1	0.073
74	10.40	33.44	3.90	30	12.40	33.15	5.11	25.10	288.0	0.105
99	9.73	33.70	3.18	50	10.85	33.23	4.89	25.45	255.2	0.159
124	9.20	33.86	2.42	75	10.40	33.44	3.87	25.69	232.8	0.220
153	8.79	33.95	1.91	100	9.73	33.71	2.96	26.01	202.5	0.275
177	8.57	34.04	1.61	150	8.83	33.94	1.97	26.34	172.5	0.368
201	8.42	34.05	1.47	200	8.46	34.05	1.48	26.48	159.6	0.451
249	8.20	34.12	1.32	250	8.20	34.12	1.32	26.57	151.5	0.529
297	7.97	34.18	1.20	300	7.95	34.18	1.19	26.66	144.2	0.603
399	7.29	34.22	0.97	400	7.29	34.22	0.97	26.79	133.4	0.742
495	6.44	34.23	0.65	500	6.40	34.23	0.63	26.91	121.8	0.869
601	5.76	34.27	0.41	600	5.77	34.27	0.42	27.03	111.8	0.986
757	4.90	34.34	0.44	700	5.19	34.32	0.42	27.14	101.9	1.093
1041	3.96	34.43	0.59	800	4.72	34.36	0.47	27.22	94.1	1.191
				1000	4.04	34.42	0.58	27.34	83.2	1.368

70.90K-31 CREST; October 15, 1950; 1500 GCT; 34°54'N, 124°29'W; sounding, 2,340 fm; wind, 320°, force 1; weather, overcast; sea, moderate; wire angle, 0°.

0	16.21	33.17	5.70	0	16.21	33.17	5.70	24.32	361.8	0.000
10	16.21	33.17	5.58	10	16.21	33.17	5.58	24.32	362.0	0.036
50	10.02	32.86r	5.58u	20	16.13	33.18	5.50	24.34	360.1	0.072
75	10.30	33.49	4.25	30	15.90	33.20	5.47	24.41	354.0	0.108
100	9.45	33.74	2.82	50	10.02	33.28	5.29	25.62	238.4	0.167
124	9.06	33.87	2.23	75	10.30	33.49	4.25	25.74	227.5	0.225
153	8.72	33.96	1.87	100	9.45	33.74	2.82	26.08	195.9	0.278
177	8.56	34.02	1.61	150	8.77	33.95	1.90	26.35	170.8	0.370
207	8.42	34.03	1.47	200	8.47	34.03	1.50	26.46	161.3	0.453
260	8.10	34.11	1.38	250	8.17	34.09	1.40	26.56	153.3	0.532
319	7.78	34.14	1.11	300	7.89	34.14	1.20	26.64	146.3	0.606

70.90K-32 CREST; October 15, 1950; 1800 GCT; 34°52'N, 124°29'W; sounding, 2,350 fm; wind, calm; weather, cloudy; sea, moderate; wire angle, 0°.

0	16.38	33.13	4.47	0	16.38	33.13	4.47	24.24	368.6	0.000
10	16.11	33.13	4.40	10	16.11	33.13	4.40	24.31	362.6	0.037
50	10.42	33.28	3.65	20	15.69	33.15	4.27	24.42	352.8	0.072
75	10.30	33.50	3.33	30	13.00	33.17	4.09	25.00	297.7	0.105
99	9.69	33.69	2.46	50	10.42	33.28	3.65	25.56	244.5	0.159
123	9.14	33.84	2.03	75	10.30	33.50	3.33	25.75	226.8	0.218
152	8.77	33.91	1.59	100	9.70	33.70	2.44	26.01	202.8	0.272
176	8.62	33.96	1.16	150	8.80	33.91	1.62	26.32	174.2	0.366
205	8.42	34.00	1.05	200	8.48	33.99	1.04	26.43	164.4	0.450
260	8.14	34.11	0.96	250	8.20	34.09	0.97	26.55	153.7	0.530
319	7.88	34.12	0.89	300	7.98	34.12	0.90	26.61	149.1	0.606

70.90K-33 CREST; October 15, 1950; 2117 GCT; 34°54'N, 124°24'W; sounding, 2,350 fm; wind, 180°, force 1; weather, partly cloudy; sea, rough; wire angle, 2°.

0	17.16	33.14	5.41	0	17.16	33.14	5.41	24.07	384.9	0.000
10	16.39	33.21	5.26	10	16.39	33.21	5.26	24.30	363.5	0.037
50	10.65	33.26	4.78	20	14.54	33.23	5.12	24.73	323.1	0.072
75	10.06	33.60	3.40	30	10.60	33.24	5.00	25.50	250.0	0.100
99	-	33.78	2.81	50	10.65	33.26	4.78	25.50	249.9	0.150
123	9.12	33.89	2.36	75	10.06	33.60	3.40	25.87	215.6	0.209
152	8.73	33.98	1.84	100	9.55	33.78	2.81	26.10	194.5	0.260
176	8.65	34.02	1.65	150	8.75	33.98	1.86	26.38	168.3	0.350
206	8.42	34.00	1.41	200	8.49	34.00	1.47	26.44	163.8	0.433
260	8.16	34.07	1.32	250	8.20	34.05	1.32	26.52	156.7	0.514
318	7.87	34.12	1.11	300	7.96	34.11	1.19	26.60	149.6	0.590

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

CREST; October 16, 1950; 0000 GCT; 34°53'N, 124°30.5'W; sounding, 2,350 fm; wind, 140°, force 2; weather, overcast; sea, rough; wire angle, 11°. 70.90K-34

0	16.69	33.12	5.81	0	16.69	33.12	5.81	24.17	276.1	0.000
10	16.15	33.13	5.54	10	16.15	33.13	5.54	24.30	364.1	0.037
49	10.24	33.37	4.35	20	15.85	33.17	5.21	24.40	354.8	0.073
73	9.70	33.71	2.83	30	12.30	33.22	4.96	25.17	281.0	0.105
97	9.23	33.85	2.27	50	10.22	33.38	4.31	25.67	233.8	0.156
121	8.99	33.91	1.97	75	9.68	33.73	2.78	26.04	199.7	0.210
149	8.82	33.93	1.89	100	9.21	33.86	2.22	26.21	183.3	0.258
172	8.72	33.96	1.70	150	8.82	33.93	1.87	26.33	173.0	0.347
195	8.56	34.00	1.57	200	8.53	34.91	1.54	26.44	163.7	0.432
242	8.30	34.04	1.44	250	8.23	34.05	1.40	26.51	157.1	0.512
289	8.02	34.09	1.25	300	7.97	34.10	1.20	26.59	150.4	0.588
387	7.54	34.14	0.98	400	7.44	34.14	0.95	26.70	141.4	0.734
483	6.66	34.18	0.75	500	6.49	34.19	0.72	26.87	126.0	0.868
591	5.78	34.22	0.60	600	5.71	34.22	0.60	26.99	114.7	0.989
744	4.94	34.30	0.47	700	5.15	34.28	0.50	27.11	104.3	1.098
1025	4.02	34.42	0.55	800	4.71	34.33	0.48	27.20	96.2	1.199
				1000	4.05	34.42	0.53	27.34	83.4	1.378

CREST; October 16, 1950; 0300 GCT; 34°56'N, 124°28'W; sounding, 2,350 fm; wind, 180°, force 5; weather, drizzle; sea, rough; wire angle, 9°. 70.90K-35

0	16.88	33.22	5.24	0	16.88	33.22	5.24	24.20	373.0	0.000
10	16.88	33.22	5.47	10	16.88	33.22	5.48	24.20	373.1	0.037
49	10.93	33.30	4.56	20	16.85	33.23	5.37	24.21	372.2	0.075
74	10.14	33.57	3.84	30	15.40	33.24	5.11	24.55	340.4	0.110
98	9.46	33.80	2.51	50	10.72	33.30	4.55	25.52	248.0	0.169
123	9.22	33.84	2.36	75	10.13	33.58	3.80	25.84	218.1	0.227
152	8.94	33.94	1.96	100	9.43	33.80	2.51	26.13	191.1	0.278
176	8.77	33.98	2.00	150	8.95	33.94	1.98	26.32	174.3	0.370
204	8.58	34.04	1.67	200	8.59	34.03	1.71	26.44	163.1	0.454
257	8.31	34.11	1.61	250	8.33	34.10	1.62	26.54	154.9	0.534
316	7.94	34.14	1.39	300	8.04	34.13	1.47	26.61	149.2	0.609

CREST; October 16, 1950; 0600 GCT; 34°52.5'N, 124°30'W; sounding, 2,370 fm; wind, 180°, force 2; weather, partly cloudy; sea, rough; wire angle, 0°. 70.90K-36

0	16.51	33.12	5.51	0	16.51	33.12	5.51	24.21	371.9	0.000
10	16.46	33.17	5.62	10	16.46	33.17	5.62	24.26	367.7	0.037
50	10.15	33.57	3.84	20	16.25	33.25	5.57	24.37	257.6	0.073
75	9.60	33.77	2.80	30	12.40	33.34	5.30	25.25	274.0	0.105
100	9.21	33.87	2.17	50	10.15	33.57	3.84	25.83	218.6	0.154
125	9.06	33.93	2.04	75	9.60	33.77	2.80	26.08	195.5	0.206
154	8.83	33.96	1.81	100	9.21	33.87	2.17	26.22	182.5	0.253
178	8.74	34.00	1.67	150	8.87	33.96	1.86	26.35	171.6	0.341
206	8.48	34.02	1.57	200	8.54	34.02	1.60	26.44	163.1	0.426
260	8.18	34.09	1.35	250	8.22	34.07	1.40	26.53	155.5	0.505
319	7.80	34.16	0.96	300	7.93	34.14	1.07	26.63	146.9	0.580

CREST; October 16, 1950; 0900 GCT; 34°53'N, 124°30'W; sounding, 2,350 fm; wind, 220°, force 3; weather, partly cloudy; sea, missing; wire angle, 3°. 70.90K-37

0	16.82	33.21	4.57	0	16.82	33.21	4.57	24.20	372.4	0.000
10	16.82	33.21	5.36	10	16.82	33.21	5.36	24.20	372.7	0.037
50	10.33	33.35	3.72	20	16.53	33.22	5.23	24.28	365.9	0.074
75	9.80	33.71	2.74	30	13.40	33.24	4.75	24.97	300.2	0.107
99	9.41	33.82	2.50	50	10.33	33.35	3.72	25.63	238.0	0.161
123	9.19	33.84	2.15	75	9.80	33.71	2.74	26.00	203.1	0.216
153	8.94	33.95	2.01	100	9.41	33.82	2.50	26.15	189.3	0.265
177	8.79	33.96	1.71	150	8.97	33.94	2.03	26.31	174.6	0.356
206	8.59	34.02	1.52	200	8.63	34.00	1.54	26.41	165.9	0.441
260	8.33	34.09	1.27	250	8.38	34.08	1.32	26.52	157.1	0.522
319	7.92	34.14	1.10	300	8.07	34.13	1.14	26.60	149.7	0.599

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

70.90K-38 CREST; October 16, 1950; 1200 GCT; 34°52.5'N, 124°29'W; sounding, 2,350 fm; wind, 220°, force 3; weather, partly cloudy; sea, missing; wire angle, 5°.

0	16.48	33.13	5.43	0	16.48	33.13	5.43	24.22	370.8	0.000
10	16.42	33.17	5.48	10	16.42	33.17	5.48	24.27	266.8	0.037
50	10.42	33.28	4.76	20	16.28	33.20	5.39	24.32	361.9	0.073
75	9.77	33.69	3.09	30	13.25	33.22	5.24	24.99	298.8	0.106
99	9.27	33.80	2.08	50	10.42	33.28	4.76	25.56	244.5	0.161
123	9.04	33.89	1.97	75	9.77	33.69	3.09	25.99	203.8	0.217
154	8.75	33.98	1.61	100	9.25	33.80	2.07	26.16	188.3	0.266
178	8.61	34.06	1.63	150	8.78	33.97	1.62	26.37	169.5	0.355
202	8.46	34.09	1.60	200	8.48	34.09	1.61	26.51	157.0	0.436
250	8.33	34.06	1.38	250	8.33	34.06	1.38	26.51	157.9	0.516
298	7.88	34.11	1.14	300	7.87	34.11	1.14	26.62	148.2	0.592
400	7.39	34.16	0.93	400	7.39	34.16	0.93	26.72	139.4	0.736
496	6.62	34.23	0.67	500	6.59	34.23	0.66	26.89	124.4	0.868
603	5.80	34.25	0.45	600	5.82	34.25	0.46	27.00	114.0	0.987
760	4.82	34.32	0.36	700	5.14	34.29	0.38	27.12	103.5	1.096
1045	3.92	34.36	0.55	800	4.65	34.33	0.38	27.21	95.5	1.195
				1000	4.02	34.36	0.51	27.30	87.4	1.378

70.90K-39 CREST; October 16, 1950; 1500 GCT; 34°50'N, 124°31'W; sounding, 2,360 fm; wind, 220°, force 4; weather, rain; sea, rough; wire angle, 2°.

0	16.86	33.19	5.34	0	16.86	33.19	5.34	24.18	375.0	0.000
10	16.83	33.17	4.47	10	16.83	33.17	4.74	24.18	375.6	0.038
50	10.21	33.39	4.10	20	16.25	33.19	4.50	24.32	362.0	0.074
75	9.82	33.71	3.19	30	15.45	33.24	4.34	24.54	341.5	0.110
100	9.34	33.80	2.36	50	10.21	33.39	4.10	25.68	232.7	0.167
124	9.08	33.89	2.08	75	9.82	33.71	3.19	26.00	203.5	0.222
153	8.86	33.91	1.83	100	9.34	33.80	2.36	26.15	189.7	0.271
178	8.70	34.02	1.64	150	8.89	33.91	1.86	26.30	175.6	0.362
207	8.48	34.04	1.57	200	8.53	34.04	1.58	26.46	161.4	0.446
260	8.24	34.09	1.35	250	8.31	34.08	1.39	26.53	156.1	0.526
320	7.89	34.18	1.12	300	8.00	34.15	1.21	26.63	147.2	0.601

70.90K-40 CREST; October 16, 1950; 1800 GCT; 34°53.5'N, 124°27'W; sounding, 2,370 fm; wind, 220°, force 4; weather, cloudy; sea, rough; wire angle, 7°.

0	16.63	33.12	5.12	0	16.63	33.12	5.12	24.18	375.0	0.000
10	16.54	33.12	5.18	10	16.54	33.12	5.18	24.20	373.3	0.037
50	10.26	33.33	4.35	20	16.27	33.14	5.10	24.28	366.0	0.074
75	9.68	33.70	2.68	30	12.28	33.18	4.96	25.14	283.6	0.107
99	9.20	33.84	2.20	50	10.26	33.33	4.35	25.63	238.2	0.159
123	8.99	33.89	1.86	75	9.68	33.70	2.68	26.01	202.0	0.214
152	8.75	33.95	1.63	100	9.19	33.84	2.18	26.20	184.4	0.262
177	8.60	34.00	1.51	150	8.77	33.94	1.66	26.35	171.5	0.351
205	8.44	34.05	1.50	200	8.49	34.04	1.50	26.47	160.8	0.434
258	8.18	34.07	1.24	250	8.22	34.07	1.30	26.53	155.5	0.513
317	7.86	34.14	1.00	300	7.96	34.11	1.08	26.60	149.6	0.589

70.90K-41 CREST; October 16, 1950; 2100 GCT; 34°49'N, 124°35'W; sounding, 2,400 fm; wind, 200°, force 4; weather, cloudy; sea, missing; wire angle, 9°.

0	17.11	33.21	4.24	0	17.11	33.21	4.24	24.14	379.0	0.000
10	16.96	33.17	4.79	10	16.96	33.17	4.79	24.14	378.5	0.038
49	11.37	-	-	20	16.77	(33.18)	(4.77)	(24.19)	(374.1)	(0.075)
74	10.11	33.49	3.00	30	15.00	(33.22)	(4.63)	(24.62)	(333.5)	(0.111)
98	9.47	33.73	2.31	50	11.30	(33.32)	(3.94)	(25.44)	(256.4)	(0.170)
121	9.16	33.87	1.75	75	10,06	33.50	2.97	25.79	222.8	(0.230)
148	8.83	33.93	1.56	100	9.44	33.74	2.28	26.08	195.7	(0.282)
171	8.72	33.96	1.56	150	8.82	33.93	1.57	26.33	173.0	(0.374)
200	8.52	34.03	1.39	200	8.52	34.03	1.39	26.45	162.0	(0.458)
252	8.24	34.16	1.10	250	8.26	34.16	1.11	26.60	149.4	(0.536)
312	7.93	34.13	1.01	300	8.01	34.14	1.04	26.62	148.1	(0.610)

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
CREST; October 16, 1950; 2400 GCT; 34°33.5'N, 124°37.5'W; sounding, 2,400 fm; wind, 260°, force 4; weather, partly cloudy; sea, missing; wire angle, 23°.													70.90K-42
0	17.13	33.19	4.95		0	17.13	33.19	4.95		24.12	380.8	0.000	
9	16.48	33.12	5.68		10	16.47	33.12	5.68		24.22	371.6	0.038	
46	10.21	33.35	4.38		20	16.36	33.14	5.55		24.26	368.0	0.075	
69	9.72	33.72	2.90		30	14.50	33.21	5.10		24.72	324.1	0.109	
91	9.38	33.79	2.38		50	10.03	33.41	4.18		25.73	228.5	0.164	
113	9.10	-	-		75	9.65	33.74	2.77		26.05	198.5	0.218	
140	8.88	33.89	1.92		100	9.40	33.70	2.40		26.13	191.4	0.267	
162	8.76	34.04	1.69		150	8.82	33.97	1.80		26.36	170.1	0.357	
184	8.64	34.07	1.63		200	8.56	34.07	1.59		26.48	159.7	0.439	
228	8.41	34.07	1.49		250	8.29	34.09	1.41		26.54	155.0	0.518	
273	8.17	34.13	1.34		300	8.03	34.14	1.24		26.62	148.4	0.594	
366	7.68	34.16	1.00		400	7.45	34.18	0.92		26.73	138.6	0.737	
456	7.08	34.22	0.89		500	6.70	34.23	0.78		26.87	125.9	0.870	
555	6.23	34.23	0.58		600	5.90	34.25	0.49		26.99	115.0	0.990	
702	5.22	34.33	0.34		700	5.24	34.33	0.34		27.14	101.8	1.099	
984	4.16	34.45	0.51		800	4.72	34.39	0.38		27.25	91.9	1.195	
					1000	(4.13)	(34.45)	(0.50)		(27.36)	(82.1)	(1.369)	
CREST; October 17, 1950; 0300 GCT; 34°50'N, 124°30'W; sounding, 2,370 fm; wind, 270°, force 4; weather, partly cloudy; sea, very rough; wire angle, 12°.													70.90K-43
0	17.36	33.32	5.11		0	17.36	33.32	5.11		24.16	376.5	0.000	
10	17.35	33.28	5.32		10	17.35	33.28	5.32		24.13	379.5	0.038	
49	10.87	33.26	4.81		20	16.90	33.27	5.27		24.23	270.4	0.075	
73	9.91	33.55	3.87		30	15.40	33.26	5.15		24.56	339.0	0.111	
98	9.36	33.73	2.90		50	10.80	33.26	4.80		25.48	252.5	0.170	
122	8.98	33.89	2.18		75	9.85	33.57	3.80		25.88	214.3	0.228	
151	8.73	33.95	1.85		100	9.32	33.75	2.83		26.11	193.1	0.279	
174	8.58	34.05	1.61		150	8.73	33.95	1.86		26.36	170.2	0.370	
203	8.40	34.04	1.46		200	8.40	34.04	1.48		26.48	159.5	0.452	
255	8.17	34.09	1.28		250	8.18	34.08	1.29		26.55	154.1	0.531	
314	7.84	34.15	1.11		300	7.93	34.14	1.16		26.63	146.9	0.606	
CREST; October 17, 1950; 0600 GCT; 34°54'N, 124°25'W; sounding, 2,350 fm; wind, 270°, force 4; weather, partly cloudy; sea, very rough; wire angle, 0°.													70.90K-44
0	17.26	33.25	5.05		0	17.26	33.25	5.05		24.13	379.6	0.000	
10	17.16	33.24	4.88		10	17.16	33.24	4.88		24.15	377.9	0.038	
50	10.84	33.30	4.85		20	16.03	33.25	4.83		24.42	352.8	0.074	
75	9.85	33.62	3.58		30	15.60	33.26	4.83		24.52	343.2	0.109	
100	9.36	33.77	2.70		50	10.84	33.30	4.85		25.50	249.8	0.168	
124	9.00	33.91	2.29		75	9.85	33.62	3.58		25.92	210.6	0.226	
153	8.77	33.96	1.70		100	9.36	33.77	2.70		26.12	192.3	0.276	
177	8.59	33.96	1.54		150	8.80	33.96	1.79		26.36	170.5	0.367	
206	8.39	34.04	1.46		200	8.43	34.03	1.48		26.47	160.7	0.449	
259	8.14	34.04	1.21		250	8.18	34.04	1.25		26.51	157.1	0.530	
318	7.83	34.11	1.10		300	7.94	34.09	1.12		26.59	150.7	0.606	
CREST; October 17, 1950; 0900 GCT; 34°53.5'N, 124°32'W; sounding, 2,400 fm; wind, 260°, force 3; weather, partly cloudy; sea, high; wire angle, 0°.													70.90K-45
0	17.35	33.22	4.65		0	17.35	33.22	4.65		24.09	383.6	0.000	
10	17.33	33.22	4.82		10	17.33	33.22	4.82		24.09	383.4	0.038	
50	10.24	33.33	4.10		20	16.70	33.23	4.77		24.25	368.9	0.076	
75	9.75	33.58	2.98		30	15.60	33.26	4.60		24.52	343.2	0.112	
99	9.39	33.80	2.20		50	10.24	33.33	4.10		25.63	238.0	0.170	
123	9.04	33.87	1.86		75	9.75	33.58	2.98		25.91	212.0	0.226	
151	8.78	33.96	1.73		100	9.37	33.80	2.19		26.14	190.2	0.276	
176	8.63	34.00	1.53		150	8.78	33.96	1.72		26.36	170.2	0.366	
206	8.48	34.04	1.43		200	8.50	34.03	1.43		26.46	161.7	0.449	
260	8.18	34.07	1.30		250	8.22	34.07	1.32		26.53	155.5	0.529	
319	7.86	34.14	1.01		300	7.95	34.12	1.11		26.61	148.7	0.604	

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OBSERVED					INTERPOLATED					COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m
7090K-46	CREST; October 17, 1950; 1201 GCT; 34°34'N, 124°32.5'W; sounding, 2,350 fm; wind, 260°, force 3; weather, partly cloudy; sea, high; wire angle, 8°.											
0	17.24	33.26	5.15		0	17.24	33.26	5.15		24.14	378.4	0.000
10	17.23	33.24	5.39		10	17.23	33.24	5.39		24.13	379.9	0.038
50	10.26	33.42	4.46		20	16.65	33.26	5.32		24.28	365.6	0.075
79	9.68	33.64	3.43		30	15.00	33.30	5.14		24.68	327.7	0.110
109	9.31	33.84	2.41		50	10.26	33.42	4.46		25.70	231.5	0.166
134	9.09	33.91	2.15		75	9.74	33.60	3.57		25.92	210.3	0.221
164	8.81	33.96	1.80		100	9.40	33.79	2.69		26.13	191.4	0.271
193	8.63	34.02	1.67		150	8.93	33.94	1.97		26.32	174.0	0.363
217	8.48	34.00	1.51		200	8.59	34.02	1.63		26.44	163.8	0.447
270	8.11	34.13	1.31		250	8.23	34.07	1.36		26.53	155.6	0.527
323	7.82	34.18	1.11		300	7.94	34.17	1.20		26.65	144.8	0.602
434	7.31	34.18	0.83		400	7.50	34.18	0.90		26.72	139.4	0.744
542	6.34	34.22	0.63		500	6.79	34.20	0.69		26.84	129.4	0.878
649	5.64	34.29	0.39		600	5.93	34.26	0.50		27.00	114.7	1.001
818	4.65	34.36	0.39		700	5.32	34.32	0.39		27.12	103.5	1.110
1124	3.69	34.45	0.55		800	4.74	34.36	0.40		27.22	94.4	1.209
					1000	3.95	34.42	0.39		27.35	82.2	1.385
7090K-47	CREST; October 17, 1950; 1500 GCT; 34°52'N, 124°32'W; sounding, 2,370 fm; wind, 270°, force 2; weather, cloudy; sea, rough; wire angle, 0°.											
0	17.13	33.24	5.06		0	17.13	33.24	5.06		24.16	377.2	0.000
10	17.02	33.24	5.39		10	17.02	33.24	5.39		24.18	375.0	0.038
50	10.82	33.31	4.84		20	16.70	33.25	5.36		24.26	367.4	0.075
75	9.90	33.57	3.83		30	14.60	33.27	5.24		24.75	321.7	0.109
100	9.34	33.82	2.38		50	10.82	33.31	4.84		25.51	249.1	0.166
125	9.06	33.84	2.08		75	9.90	33.57	3.83		25.87	215.1	0.224
154	8.82	34.00	1.86		100	9.34	33.82	2.38		26.16	188.4	0.275
178	8.66	34.02	1.59		150	8.85	33.98	1.89		26.36	169.8	0.364
208	8.49	34.05	1.54		200	8.53	34.04	1.53		26.46	161.4	0.447
261	8.16	34.05	1.31		250	8.23	34.05	1.38		26.51	157.1	0.527
321	7.84	34.13	1.13		300	7.95	34.11	1.18		26.60	149.4	0.603
7090K-48	CREST; October 17, 1950;1800 GCT; 34°51'N, 124°32.5'W; sounding, 2,370 fm; wind, 270°, force 2; weather, partly cloudy; sea, very rough; wire angle, 0°.											
0	16.88	33.19	4.78		0	16.88	33.19	4.78		24.18	375.0	0.000
10	16.73	33.17	5.19		10	16.73	33.17	5.19		24.20	373.4	0.037
50	10.12	33.48	3.66		20	16.53	33.20	5.07		24.26	367.3	0.075
75	9.49	33.85	2.54		30	15.20	33.26	4.60		24.61	334.8	0.110
99	9.12	33.82	2.08		50	10.12	33.48	3.66		25.76	224.9	0.166
123	8.90	33.95	1.74		75	9.49	33.85	2.54		26.16	188.0	0.217
151	8.73	33.96	1.61		100	9.12	33.82	2.08		26.20	184.8	0.264
175	8.61	34.02	1.48		150	8.74	33.96	1.61		26.37	169.6	0.352
203	8.42	34.05	1.33		200	8.45	34.05	1.34		26.48	159.5	0.434
256	8.12	34.09	1.21		250	8.15	34.08	1.22		26.55	153.7	0.513
315	7.85	34.14	1.08		300	7.90	34.13	1.11		26.63	147.2	0.588
7090K-49	CREST; October 17, 1950; 2100 GCT; 34°55'N, 124°31'W; sounding, 2,350 fm; wind, 270°, force 3; weather, partly cloudy; sea, very rough; wire angle, 5°.											
0	17.66	33.28	4.49		0	17.66	33.28	4.49		24.06	386.1	0.000
10	17.33	33.28	4.54		10	17.33	33.28	4.54		24.13	379.5	0.038
50	10.46	–	–		20	16.90	(33.30)	(4.51)		(24.25)	(368.2)	(0.076)
75	9.97	33.55	3.38		30	14.70	(33.33)	(4.43)		(24.77)	(319.3)	(0.110)
100	9.29	33.75	2.76		50	10.46	(33.41)	(4.07)		(25.66)	(235.4)	(0.165)
124	9.04	33.89	2.09		75	9.97	33.55	3.38		25.85	217.4	(0.222)
153	8.76	–	–		100	9.29	33.75	2.77		26.11	192.6	(0.273)
177	8.62	33.98	1.49		150	8.79	33.95	1.70		26.35	171.1	(0.364)
206	8.40	34.02	1.42		200	8.44	34.01	1.42		26.45	162.3	(0.447)
260	8.17	34.04	1.24		250	8.22	34.04	1.29		26.51	157.7	(0.528)
320	7.91	34.09	1.04		300	8.00	34.07	1.10		26.56	153.1	(0.605)

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

CREST; October 18, 1950; 0000 GCT; 34°54'N, 124°30'W; sounding, 2,350 fm; wind, 270°, force 1; weather, partly cloudy; sea, missing; wire angle, 3°. 70.90K-50

0	17.82	33.28	5.09	0	17.82	33.28	5.09	24.02	390.4	0.000
10	17.30	33.28	5.31	10	17.30	33.28	5.31	24.15	378.4	0.038
50	10.69	33.28	4.76	20	17.06	33.28	5.28	24.20	373.3	0.076
75	10.00	33.51	3.88	30	16.62	33.28	5.15	24.30	363.8	0.113
100	9.48	33.68	3.24	50	10.69	33.28	4.76	25.51	249.3	0.174
124	9.10	33.81	2.58	75	10.00	33.51	3.88	25.81	221.3	0.233
153	8.84	33.91	1.87	100	9.48	33.68	3.24	26.03	200.5	0.286
176	8.67	33.93	1.71	150	8.87	33.91	1.93	26.31	175.3	0.380
201	8.46	34.02	1.52	200	8.48	34.02	1.51	26.45	162.2	0.464
248	8.19	34.02	1.32	250	8.17	34.02	1.31	26.50	158.4	0.544
296	7.94	34.13	1.19	300	7.93	34.14	1.18	26.63	146.9	0.620
395	7.44	34.18	0.92	400	7.44	34.18	0.90	26.73	138.5	0.763
490	6.76	34.23	0.88	500	6.66	34.23	0.87	26.88	125.4	0.895
596	5.80	34.25	0.52	600	5.78	34.25	0.50	27.01	113.4	1.015
750	4.94	34.36	0.39	700	5.18	34.32	0.40	27.14	101.7	1.122
1033	3.94	34.40	0.56	800	4.74	34.38	0.40	27.24	92.9	1.220
				1000	4.04	34.40	0.56	27.33	84.7	1.397

CREST; October 18, 1950; 0300 GCT; 34°54'N, 124°26.5'W; sounding, 2,360 fm; wind, 270°, force 1; weather, partly cloudy; sea, rough; wire angle, 0°. 70.90K-51

0	17.71	33.28	5.40	0	17.71	33.28	5.40	24.04	387.7	0.000
10	17.28	33.24	5.36	10	17.28	33.24	5.36	24.12	380.4	0.038
50	12.34	33.21	5.26	20	17.22	33.22	5.32	24.12	381.3	0.076
75	10.27	33.49	4.34	30	16.95	33.22	5.31	24.18	375.5	0.114
100	9.40	33.75	3.06	50	12.34	33.21	5.26	25.16	282.3	0.180
124	8.98	33.84	2.32	75	10.27	33.49	4.34	25.75	226.7	0.244
154	8.72	33.98	1.86	100	9.40	33.75	3.06	26.10	194.2	0.296
178	8.61	34.02	1.78	150	8.76	33.96	1.90	26.36	169.9	0.387
208	8.38	34.03	1.49	200	8.44	34.03	1.60	26.47	160.8	0.470
261	8.11	34.13	1.30	250	8.16	34.10	1.31	26.56	152.4	0.549
321	7.78	34.16	1.24	300	7.89	34.16	1.27	26.65	144.8	0.622

CREST; October 18, 1950; 0600 GCT; 34°52'N, 124°30'W; sounding, 2,350 fm; wind, 270°, force 1; weather, clear; sea, rough; wire angle, 0°. 70.90K-52

0	17.62	33.24	4.78	0	17.62	33.24	4.78	24.04	388.5	0.000
10	16.98	33.20	5.22	10	16.98	33.20	5.22	24.16	376.8	0.038
50	10.63	33.28	4.70	20	16.14	33.20	5.20	24.35	358.8	0.075
75	10.00	33.51	3.70	30	13.00	33.22	5.08	25.04	294.0	0.108
99	9.37	33.75	2.95	50	10.63	33.28	4.70	25.52	248.1	0.162
123	9.05	33.86	2.11	75	10.00	33.51	3.70	25.81	220.8	0.220
151	8.81	33.91	1.59	100	9.36	33.75	2.94	26.10	193.7	0.272
175	8.62	33.96	1.39	150	8.83	33.91	1.71	26.31	174.7	0.364
204	8.44	34.00	1.39	200	8.47	33.99	1.40	26.43	164.2	0.449
258	8.12	34.08	1.14	250	8.18	34.07	1.20	26.54	154.9	0.529
318	7.81	34.13	1.10	300	7.92	34.12	1.10	26.62	148.2	0.604

CREST; October 18, 1950; 0900 GCT; 34°49'N, 124°32.5'W; sounding, 2,360 fm; wind, 270°, force 2; weather, clear; sea, rough; wire angle, 1°. 70.90K-53

0	17.51	33.30	5.58	0	17.51	33.30	5.58	24.11	381.6	0.000
10	17.10	33.21	5.29	10	17.10	33.21	5.29	24.14	379.0	0.038
50	10.64	33.31	4.60	20	16.68	33.22	5.09	24.24	369.2	0.075
75	9.99	33.51	3.80	30	15.10	33.25	4.92	24.62	333.4	0.111
100	9.46	33.69	2.91	50	10.64	33.31	4.60	25.54	246.2	0.169
124	9.08	33.87	2.07	75	9.99	33.51	3.80	25.81	220.8	0.227
153	8.85	33.95	1.75	100	9.46	33.69	2.91	26.04	199.6	0.279
177	8.72	34.00	1.69	150	8.87	33.94	1.77	26.33	173.1	0.373
206	8.52	34.03	1.43	200	8.57	34.02	1.49	26.44	163.5	0.456
259	8.19	34.11	1.30	250	8.24	34.09	1.31	26.54	154.3	0.536
319	7.88	34.14	1.14	300	7.97	34.14	1.18	26.62	147.5	0.611

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

70.90K-54 CREST; October 18, 1950; 1200 GCT; 34°53'N, 124°30'W; sounding, 2,350 fm; wind, 270°, force 2; weather, clear; sea, rough; wire angle, 9°.

0	17.57	33.30	5.51	0	17.57	33.30	5.51	24.10	382.8	0.000
10	17.42	33.30	5.41	10	17.42	33.30	5.41	24.13	379.9	0.038
49	9.61	32.98	5.33	20	17.18	33.27	5.38	24.17	376.7	0.076
74	9.62	33.49	4.10	30	12.14	33.20	5.35	25.19	279.6	0.109
98	9.38	33.71	3.09	50	9.82	32.98	5.32	25.43	257.0	0.162
123	9.12	33.87	2.32	75	9.61	33.50	4.05	25.87	215.7	0.221
153	8.78	33.94	1.90	100	9.35	33.72	3.06	26.08	195.8	0.273
177	8.66	33.97	1.69	150	8.80	33.93	1.94	26.33	172.7	0.365
201	8.52	34.00	1.57	200	8.54	34.00	1.58	26.43	164.5	0.449
250	8.29	34.08	1.47	250	8.29	34.08	1.47	26.53	155.6	0.530
298	8.02	34.11	1.21	300	8.03	34.11	1.21	26.59	150.6	0.606
399	7.49	34.16	0.94	400	7.47	34.16	0.92	26.71	140.4	0.751
495	6.78	34.18	0.67	500	6.73	34.18	0.66	26.83	130.0	0.887
602	5.96	34.25	0.44	600	5.97	34.25	0.43	26.99	115.9	1.017
756	4.97	34.34	0.45	700	5.29	34.31	0.43	27.12	103.9	1.120
1041	3.98	34.42	0.55	800	4.76	34.36	0.48	27.22	94.6	1.219
				1000	4.07	34.41	0.58	27.33	84.4	1.398

70.90K-55 CREST; October 18, 1950; 1500 GCT; 34°51'N, 124°34'W; sounding, 2,360 fm; wind, 270°, force 1; weather, clear; sea, rough; wire angle, 3°.

0	17.55	33.30	5.26	0	17.55	33.30	5.26	24.10	382.5	0.000
10	17.46	33.30	5.26	10	17.46	33.30	5.26	24.12	380.8	0.038
50	9.67	32.96	5.17	20	17.37	33.28	5.23	24.13	380.3	0.076
75	9.72	33.48	4.18	30	14.70	33.21	5.21	24 68	328.1	0.112
99	9.36	33.68	3.02	50	9.67	32.96	5.17	25.44	255.9	0.170
123	8.98	33.89	2.15	75	9.72	33.48	4.18	25.83	219.2	0.229
153	8.69	34.02	1.69	100	9.34	33.68	2.98	26.05	198.6	0.282
177	8.57	34.03	1.60	150	8.72	34.02	1.73	26.42	164.9	0.373
206	8.42	34.07	1.46	200	8.45	34.06	1.50	26.49	158.8	0.453
261	8.12	34.11	1.28	250	8.19	34.11	1.31	26.57	152.1	0.531
320	7.82	34.17	1.17	300	7.94	34.15	1.20	26.64	146.3	0.605

70.90K-56 CREST; October 18, 1950; 1800 GCT; 34°51'N, 124°35'W; sounding, 2,300+ fm; wind, 270°, force 1; weather, partly cloudy; sea, rough; wire angle, 2°.

0	17.69	33.28	4.56	0	17.69	33.28	4.56	24.05	387.2	0.000
10	17.51	33.31	4.76	10	17.51	33.31	4.75	24.12	380.8	0.038
50	10.39	33.22	4.42	20	17.50	33.30	4.73	24.11	381.8	0.076
75	9.57	33.49	3.42	30	17.09	33.27	4.67	24.19	375.0	0.114
99	9.26	33.75	2.69	50	10.39	33.22	4.42	25.51	248.7	0.177
123	8.95	33.92	2.00	75	9.57	33.49	3.42	25.87	215.8	0.235
151	8.65	34.00	1.64	100	9.24	33.75	2.69	26.12	191.9	0.286
175	8.56	34.02	1.47	150	8.66	34.00	1.65	26.41	165.4	0.375
204	8.42	34.06	1.46	200	8.44	34.05	1.48	26.48	159.4	0.456
257	8.18	34.13	1.03	250	8.21	34.12	1.05	26.57	151.6	0.534
317	7.90	34.16	1.06	300	7.97	34.15	1.02	26.63	146.7	0.608

70.90K-57 CREST; October 18, 1950; 2100 GCT; 34°55'N, 124°27'W; sounding, 2,350 fm; wind, 360°, force 2; weather, partly cloudy; sea, missing; wire angle, 5°.

0	17.90	33.25	4.93	0	17.90	33.25	4.93	23.98	394.0	0.000
10	17.45	33.31	4.46r	10	17.45	33.31	(5.00)	24.13	379.4	0.039
50	12.02	33.26	4.93	20	16.99	33.30	(5.03)	24.23	370.3	0.076
75	10.26	33.46	3.92	30	16.05	33.29	(5.05)	24.44	350.6	0.112
99	9.57	33.62	2.86	50	12.02	33.26	4.93	25.25	274.0	0.175
123	9.12	33.80	2.47	75	10.26	33.46	3.92	25.73	229.1	0.238
152	8.77	33.95	1.81	100	9.54	33.62	2.86	25.97	206.2	0.292
176	8.60	34.02	1.55	150	8.79	33.94	1.84	26.34	171.8	0.387
204	8.41	34.02	1.39	200	8.44	34.02	1.41	26.46	161.6	0.470
258	8.16	34.11	1.21	250	8.19	34.10	1.22	26.56	152.8	0.549
317	7.87	34.11	1.04	300	7.96	34.11	1.10	26.60	149.6	0.624

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

CREST; October 19, 1950; 0000 GCT; 34°52.5'N, 124°25.5'W; sounding, 2,350 fm; wind, 360°, force 2; weather, partly cloudy; sea, rough; wire angle, 7°. 70.90K-58

0	17.63	33.21	5.00	0	17.63	33.21	5.00	24.02	390.5	0.000
10	17.01	33.21	5.48	10	17.01	33.21	5.48	24.16	376.7	0.038
50	11.18	33.22	5.06	20	16.56	33.21	5.45	24.26	367.3	0.076
74	9.99	33.49	4.10	30	15.84	33.22	5.35	24.44	351.2	0.111
99	9.35	33.75	2.90	50	11.18	33.22	5.06	25.38	261.7	0.173
124	9.00	33.87	2.66	75	9.97	33.50	4.08	25.81	221.4	0.233
153	8.68	33.94	1.88	100	9.32	33.75	2.89	26.11	193.1	0.285
177	8.58	33.98	1.68	150	8.71	33.93	1.98	26.35	171.4	0.376
201	8.46	34.02	1.61	200	8.47	34.02	1.61	26.45	162.0	0.459
249	8.16	34.12	1.36	250	8.16	34.12	1.35	26.58	150.9	0.538
296	7.95	34.14	1.27	300	7.93	34.14	1.26	26.63	146.9	0.612
395	7.38	34.20	0.92	400	7.32	34.20	0.89	26.77	135.3	0.752
489	6.55	34.22	0.63	500	6.46	34.22	0.61	26.90	123.4	0.883
593	5.60	34.20	0.52	600	5.56	34.20	0.50	27.00	114.3	1.001
747	4.76	34.31	0.41	700	4.97	34.26	0.43	27.11	103.6	1.110
1029	3.97	34.41	0.52	800	4.57	34.35	0.42	27.23	93.0	1.209
				1000	4.03	34.41	0.51	27.34	83.9	1.386

CREST; October 19, 1950; 0300 GCT; 34°50.5'N, 124°28'W; sounding, 2,300+ fm; wind, 360°, force 3; weather, overcast; sea, rough; wire angle, 0°. 70.90K-59

0	17.20	33.16	5.14	0	17.20	33.16	5.14	24.07	384.8	0.000
10	16.75	33.16	5.37	10	16.75	33.16	5.37	24.18	374.8	0.038
50	12.89	33.06	5.45	20	16.50	33.14	5.44	24.23	371.1	0.075
75	10.31	33.35	4.45	30	16.33	33.12	5.49	24.25	369.1	0.112
99	9.69	33.60	3.34	50	12.89	33.06	5.45	24.93	304.4	0.180
124	9.42	33.75	2.98	75	10.31	33.35	4.45	25.63	238.0	0.247
153	8.93	33.86	2.27	100	9.69	33.60	3.32	25.93	210.0	0.303
177	8.70	33.96	1.80	150	8.96	33.85	2.37	26.25	181.1	0.401
206	8.46	34.04	1.52	200	8.50	34.03	1.57	26.46	161.7	0.487
260	8.16	34.09	1.33	250	8.21	34.08	1.35	26.54	154.6	0.566
321	7.87	34.14	1.15	300	7.99	34.13	1.22	26.61	148.5	0.642

CREST; October 19, 1950; 0600 GCT; 34°49.5'N, 124°28'W; sounding, 2,300+ fm; wind, 360°, force 3, weather, cloudy; sea, rough; wire angle, 0°. 70.90K-60

0	17.43	33.21	5.33	0	17.43	33.21	5.33	24.06	385.9	0.000
10	16.98	33.21	5.13	10	16.98	33.21	5.13	24.17	376.3	0.038
50	10.86	33.22	4.80	20	16.79	33.21	5.01	24.21	372.4	0.075
75	10.01	33.49	4.01	30	15.50	33.21	4.92	24.50	344.7	0.111
99	9.61	33.68	3.14	50	10.86	33.22	4.80	25.44	256.2	0.171
123	9.09	33.84	2.40	75	10.01	33.49	4.01	25.79	222.8	0.231
152	8.68	-	1.72	100	9.59	33.69	3.14	26.02	201.8	0.284
176	8.54	34.04	1.58	150	8.71	33.97	1.74	26.38	168.4	0.377
205	8.36	34.02	1.47	200	8.40	34.02	1.49	26.47	161.0	0.459
259	8.08	34.11	1.20	250	8.12	34.09	1.24	26.56	152.5	0.538
318	7.77	34.14	1.05	300	7.89	34.14	1.09	26.64	146.3	0.612

CREST; October 19, 1950; 0900 GCT; 34°54'N, 124°29'W; sounding, 2,300+ fm; wind, 360°, force 3, weather, partly cloudy; sea, rough; wire angle, 0°. 70.90K-61

0	17.74	33.30	4.91	0	17.74	33.30	4.91	24.06	386.4	0.000
10	17.46	33.33	5.11	10	17.46	33.33	5.11	24.15	378.2	0.038
50	-	33.19	4.67	20	(17.01)	33.31	5.08	(24.24)	(370.0)	(0.076)
75	9.93	33.40	3.99	30	(16.50)	33.27	4.97	(24.32)	(361.9)	(0.112)
100	9.37	33.64	3.18	50	(11.39)	33.19	4.67	(25.32)	(267.5)	(0.175)
124	8.98	33.86	2.37	75	9.93	33.40	3.99	25.74	228.1	(0.237)
153	8.69	33.98	1.78	100	9.37	33.64	3.18	26.02	202.0	(0.291)
177	8.56	34.00	1.54	150	8.71	33.98	1.83	26.39	167.7	(0.383)
206	8.40	34.04	1.46	200	8.43	34.03	1.47	26.47	160.7	(0.465)
259	8.18	34.11	1.19	250	8.20	34.09	1.23	26.55	153.7	(0.544)
320	7.84	34.13	1.10	300	7.98	34.13	1.11	26.61	148.4	(0.619)

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70.90K-62 **CREST**; October 19, 1950; 1200 GCT; 34°53'N, 124°29'W; sounding, 2,300+ fm; wind, 360°, force 3; weather, partly cloudy; sea, rough; wire angle, 2°.

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
0	17.44	33.22	5.40		0	17.44	33.22	5.40		24.07	385.6	0.000
10	17.40	33.28	5.29		10	17.40	33.28	5.29		24.12	380.9	0.038
50	10.78	33.30	4.81		20	17.23	33.29	5.19		24.17	376.4	0.076
75	9.90	33.39	4.11		30	16.71	33.29	5.08		24.29	365.0	0.113
100	9.35	33.60	3.51		50	10.78	33.30	4.81		25.51	249.1	0.175
124	9.05	33.80	2.65		75	9.90	33.39	4.11		25.73	228.4	0.234
153	8.75	33.93	1.84		100	9.35	33.60	3.51		25.99	204.7	0.288
178	8.58	34.00	1.64		150	8.79	33.92	1.88		26.33	173.3	0.383
202	8.42	34.02	1.52		200	8.44	34.02	1.53		26.46	161.6	0.466
249	8.22	34.05	1.40		250	8.22	34.05	1.39		26.52	157.0	0.547
297	7.97	34.11	1.22		300	7.98	34.12	1.20		26.61	149.1	0.623
400	7.42	34.16	0.92		400	7.42	34.16	0.92		26.72	139.5	0.767
496	6.64	34.16	0.78		500	6.61	34.16	0.78		26.83	129.9	0.902
603	5.88	34.22	0.61		600	5.88	34.22	0.62		26.97	117.0	1.026
758	4.73	34.27	0.42		700	5.11	34.26	0.49		27.10	105.3	1.137
1044	3.93	34.42	0.51		800	4.50	34.28	0.42		27.18	97.3	1.238
					1000	4.00	34.39	0.49		27.32	85.0	1.420

70.90K-63 **CREST**; October 19, 1950; 1500 GCT; 34°50'N, 124°29'W; sounding, 2,300+ fm; wind, 270°, force 3; weather, partly cloudy; sea, rough; wire angle, 4°.

0	17.30	33.19	5.20		0	17.30	33.19	5.20		24.08	384.6	0.000
10	17.19	33.21	5.37		10	17.19	33.21	5.37		24.12	381.0	0.038
50	13.03	32.24	4.84		20	16.56	33.22	5.31		24.27	366.5	0.076
75	10.38	33.37	4.38		30	16.08	33.22	5.19		24.38	356.4	0.112
100	-	33.53	3.67		50	13.03	33.24	4.84		25.05	293.6	0.177
124	9.26	33.69	2.87		75	10.38	33.37	4.38		25.64	237.7	0.243
153	8.90	33.87	2.18		100	9.76	33.53	3.67		25.87	216.3	0.300
178	8.66	33.91	1.79		150	8.92	33.86	2.24		26.26	197.7	0.399
206	8.47	34.04	1.53		200	8.51	34.02	1.59		26.45	162.6	0.484
260	8.16	34.07	1.29		250	8.21	34.07	1.32		26.53	155.3	0.564
318	7.86	34.14	1.13		300	7.97	34.12	1.17		26.61	149.0	0.640

70.90K-64 **CREST**; October 19, 1950; 1800 GCT; 34°51'N, 124°34'W; sounding, 2,300+ fm; wind, 270°, force 2; weather, partly cloudy; sea, very rough; wire angle, 12°.

0	17.42	33.21	5.24		0	17.42	33.21	5.24		24.06	385.9	0.000
10	17.10	33.22	5.25		10	17.10	33.22	5.25		24.15	378.3	0.038
49	13.41	33.17	5.13		20	16.69	33.21	5.24		24.23	370.1	0.076
73	10.39	33.30	4.45		30	16.34	33.20	5.22		24.31	363.5	0.112
98	9.91	33.53	3.70		50	13.20	33.17	5.12		24.96	302.0	0.179
121	9.44	33.69	2.88		75	10.34	33.32	4.43		25.60	240.7	0.247
149	8.91	33.86	2.28		100	9.88	33.54	3.65		25.85	217.5	0.304
173	8.69	33.93	1.83		150	8.89	33.86	2.28		26.26	179.3	0.403
201	8.48	34.00	1.56		200	8.49	34.00	1.57		26.44	163.8	0.489
253	8.21	34.04	1.28		250	8.22	34.04	1.30		26.51	157.7	0.569
312	7.87	34.11	1.10		300	7.95	34.10	1.12		26.60	150.1	0.646

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
BLACK DOUGLAS; October 20, 1950; 0928 GCT; 34°33'N, 125°12'W; sounding, 2,480 fm; wind, 240°, force 2; weather, overcast; sea, moderate; wire angle, 10°.													70.100
0	17.84	33.22	5.45		0	17.84	33.22	5.45		23.97	394.6	0.000	
10	17.38	33.17	5.80		10	17.37	33.17	5.80		24.04	388.0	0.039	
25	16.39	33.24	5.58		20	16.79	33.23	5.61		24.23	370.9	0.077	
49	13.37	33.03	5.68		30	16.04	33.23	5.59		24.40	354.8	0.113	
74	9.93	32.97	5.21		50	13.18	33.03	5.68		24.85	311.9	0.180	
97	10.10	33.49	4.22		75	9.93	32.97	5.17		25.40	259.9	0.252	
149	8.91	33.85	3.29		100	10.09	33.54	4.16		25.82	220.9	0.312	
196	8.54	34.02	2.01		150	8.91	33.85	3.25		26.25	180.3	0.412	
291	7.67	34.15	1.24		200	8.49	34.03	1.96		26.46	161.6	0.497	
391	6.96	34.22	0.87		250	7.92	34.10	1.49		26.60	148.9	0.574	
486	5.99	34.16	0.91		300	7.61	34.16	1.18		26.69	140.8	0.647	
587	5.52	34.31	0.43		400	6.87	34.22	0.88		26.84	127.5	0.782	
783	4.64	34.42	0.38		500	5.90	34.17	0.90		26.93	119.7	0.905	
976	4.00a)	34.43	0.58		600	5.45	34.33	0.40		27.11	103.3	1.017	
1178	3.52	34.52	0.75		700	5.00	34.41	0.30		27.23	92.8	1.115	
					800	4.58	34.42	0.40		27.28	87.9	1.205	
					1000	3.94	34.43	0.60		27.36	81.3	1.374	
BLACK DOUGLAS; October 20, 1950; 0429 GCT; 34°13'N, 125°54'W; sounding, 2,120 fm; wind, 270°, force 2; weather, cloudy; sea, moderate; wire angle, 10°.													70.110
0	19.49	33.13	5.41		0	19.49	33.13	5.41		23.49	440.6	0.000	
10	18.95	33.19	5.47		10	18.95	33.19	5.47		23.67	423.4	0.043	
25	18.83	33.21	5.56		20	18.85	33.21	5.55		23.71	419.9	0.085	
50	16.19	33.20	4.87		30	18.78	33.22	5.52		23.74	417.8	0.127	
74	11.64	32.83	6.13		50	16.19	33.20	4.87		24.34	360.6	0.205	
97	10.04	32.75	5.90		75	11.50	32.82	6.13		25.01	297.3	0.287	
148	9.42	33.48	4.24		100	9.96	32.75	5.85		25.22	277.2	0.359	
194	8.46	33.75	3.95		150	9.40	33.49	4.21		25.89	214.5	0.482	
288	7.32	33.94	2.50		200	8.32	33.76	3.89		26.27	179.0	0.581	
387	5.93	34.07	1.58		250	7.76	33.87	3.09		26.44	163.6	0.666	
481	4.91	34.10	1.27		300	7.18	33.96	2.32		26.60	149.6	0.744	
581	4.62	34.18	0.59		400	5.75	34.08	1.52		26.88	123.2	0.880	
770	4.12	34.42	0.37		500	4.83	34.11	1.11		27.01	110.9	0.997	
964	3.59b)	34.47	0.53		600	4.58	34.20	0.52		27.11	102.3	1.104	
1165	3.25	34.51	0.78		700	4.33	34.36	0.40		27.26	88.4	1.199	
					800	4.02	34.44	0.39		27.36	79.8	1.283	
					1000	3.51	34.48	0.58		27.44	72.6	1.436	
BLACK DOUGLAS; October 19, 1950; 2318 GCT; 33°55'N, 126°35.5'W; sounding, 2,415 fm; wind, 270°, force 2; weather, partly cloudy; sea, moderate; wire angle, 0°.													70.120
0	20.88	33.51	4.66		0	20.88	33.51	4.66		23.41	447.8	0.000	
10	20.46	33.49	5.02		10	20.46	33.49	5.06		23.51	438.9	0.044	
25	20.40	33.49	5.06		20	20.40	33.49	4.78		23.53	437.7	0.088	
50	17.71	33.46	5.48c)		30	20.39	33.49	4.78		23.53	437.8	0.132	
74	15.69	33.33	5.46		50	17.71	33.46	5.48		24.18	376.1	0.213	
99	13.67	33.28	5.46		75	15.60	33.32	5.46		24.57	340.1	0.303	
152	10.06	33.31	4.46		100	13.60	33.28	5.46		24.96	302.9	0.383	
200	8.44	33.68	4.30		150	10.20	33.31	4.49		25.62	240.7	0.519	
298	7.17	33.95	3.01		200	8.44	33.68	4.30		26.19	186.9	0.626	
397	6.42	34.05	1.38		250	7.64	33.88	3.79		26.47	161.1	0.713	
494	5.73	34.13	0.84		300	7.14	33.95	2.97		26.59	149.7	0.791	
595	5.19	34.22	0.46		400	6.40	34.05	1.37		26.77	133.8	0.932	
793	4.43	34.34	0.35		500	5.69	34.13	0.81		26.93	119.9	1.059	
987	3.79	34.47	0.53		600	5.17	34.22	0.46		27.06	107.9	1.173	
1189	3.34	34.52	0.79		700	4.77	34.29	0.34		27.16	98.9	1.277	
					800	4.40	34.34	0.34		27.24	91.7	1.372	
					1000	3.76	34.48	0.53		27.42	75.5	1.539	

a) Alternate value, 3.80°C, not used in interpolation.
b) Alternate value, 3.79°C, not used in interpolation.
c) Alternate value, 5.61 ml/L, not used in interpolation.

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70.130K-1 **BLACK DOUGLAS**; October 11, 1950; 2100 GCT; 33°33'N, 127°16.5'W; sounding, 2,415 fm; wind, 010°, force 3; weather, overcast; sea, very rough; wire angle, 5°.

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^{-5}cm^3/g$	dyn. m
0	19.37	33.13	5.21		0	19.37	33.13	5.21		23.52	437.4	0.000
10	19.34	33.13	5.55a)		10	19.34	33.13	5.55		23.53	437.5	0.044
55	19.21	33.12	5.28		20	(19.34)	(33.14)	(5.53)		(23.54)	(436.8)	(0.087)
80	15.02	33.03	6.39		30	(19.34)	(33.15)	(5.47)		(23.54)	(436.4)	(0.131)
99p	10.85	33.21	5.75		50	(19.28)	(33.18)	(5.30)		(23.58)	(433.4)	(0.218)
145p	9.19	33.06	5.56		75	17.20	33.20	6.27		24.11	383.9	(0.320)
222p	8.59	33.82	4.24		100	10.79	33.21	5.75		25.44	256.8	(0.400)
321p	7.66	33.96	3.78		150	9.12	33.07	5.52		25.61	241.3	(0.525)
					200	8.74	33.50	4.95		26.01	204.6	(0.636)
					250	8.34	33.89	3.91		26.37	170.6	(0.729)
					300	7.84	33.95	3.83		26.49	159.6	(0.813)

70.130K-2 **BLACK DOUGLAS**; October 12, 1950; 0000 GCT; 33°33'N, 127°16.5'W; sounding, 2,415 fm; wind 010°, force 2; weather, overcast; sea, very rough; wire angle, 9°.

0	19.55	33.21	5.20		0	19.55	33.21	5.20		23.54	436.0	0.000
10	19.38	33.21	5.44		10	19.38	33.21	5.44		23.58	432.4	0.043
50	16.46	33.03	6.00		20	19.37	33.18	5.60		23.56	434.7	0.087
74	13.83	32.97	6.29		30	19.36	33.12	5.75		23.52	439.1	0.130
99	13.09	33.22	5.82		50	16.46	33.03	6.00		24.16	377.8	0.212
123	12.07	33.31	5.55		75	13.73	32.97	6.28		24.70	327.5	0.300
151	9.67	33.12	5.29		100	13.03	33.23	5.81		25.04	295.6	0.378
176	9.13	33.39	5.00		150	9.70	33.12	5.30		25.56	246.6	0.514
200	8.80	33.71	4.36		200	8.81	33.71	4.36		26.16	190.1	0.623
247	8.48	33.95	3.81		250	8.46	33.95	3.79		26.40	167.9	0.713
294	7.58	33.95	3.31		300	7.47	33.95	3.24		26.55	154.3	0.793
396	6.14	33.95	2.23		400	6.10	33.95	2.18		26.73	137.3	0.939
491	5.28	34.02	1.12		500	5.22	(34.04)	1.06		(26.91)	(120.8)	(1.068)
597	4.78	34.27r	0.58		600	4.78		0.56				
756	4.28	34.13r	0.34		700	4.43		0.40				

70.130K-3 **BLACK DOUGLAS**; October 12, 1950; 0300 GCT; 33°33'N, 127°16.5'W; sounding, 2,415 fm; wind, 030°, force 1; weather, overcast; sea, very rough; wire angle, 6°.

0	19.38	33.16	5.50		0	19.38	33.16	5.50		23.54	435.4	0.000
10	19.36	33.15	5.31		10	19.36	33.15	5.31		23.54	436.3	0.044
50	19.29	33.19	5.34		20	19.37	33.16	5.32		23.54	436.1	0.087
74	14.53	33.03	6.20		30	19.38	33.18	5.33		23.56	435.2	0.131
99	13.62	33.20	5.61		50	19.29	33.19	5.34		23.58	433.2	0.218
123	11.98	33.10	5.60		75	14.44	33.03	6.20		24.59	337.2	0.314
154	10.08	33.19	5.39		100	13.62	33.20	5.61		24.90	309.1	0.395
177	9.08	33.33	5.12		150	10.40	33.17	5.43		25.48	254.3	0.536
204	8.95	33.71	4.17		200	8.98	33.66	4.23		26.09	196.4	0.648
257	8.15	33.93	3.86		250	8.29	33.92	3.89		26.40	167.6	0.739
318	7.27	33.96	3.28		300	7.50	33.96	3.45		26.55	154.0	0.820

a) Alternate value, 5.38 ml/L, not used in interpolation.

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

BLACK DOUGLAS; October 12, 1950; 0600 GCT; 33°33'N, 127°16.5'W; sounding, 2,415 fm; wind, calm; weather, overcast; sea, high; wire angle, 5°. 70.130K-4

0	19.33	33.16	5.23	0	19.33	33.16	5.23	23.56	434.2	0.000
10	19.33	33.15	5.02	10	19.33	33.15	5.02	23.55	435.3	0.043
50	18.80	33.24	4.92	20	19.32	33.17	4.98	23.56	434.2	0.087
74	14.51	33.01	5.90	30	19.33	33.19	4.96	23.58	433.3	0.130
98	13.52	33.22	5.36	50	18.80	33.24	4.92	23.75	417.5	0.215
123	12.14	33.31	5.06	75	14.47	33.01	5.90	24.57	339.3	0.310
150	10.23	33.24	4.90	100	13.40	33.24	5.34	24.97	301.9	0.390
174	9.05	33.44	4.65	150	10.23	33.24	4.90	25.56	246.7	0.527
203	8.42	33.73	4.27	200	8.47	33.70	4.28	26.20	185.7	0.635
257	7.88	33.91	4.21	250	7.95	33.90	4.22	26.44	164.1	0.723
316	7.22	33.96	2.50	300	7.40	33.95	2.88	26.56	153.4	0.802

BLACK DOUGLAS; October 12, 1950; 0900 GCT; 33°33'N, 127°16.5'W; sounding, 2,415 fm; wind, 340°, force 2; weather, overcast; sea, high; wire angle, 5°. 70.130K-5

0	19.30	33.17	4.63	0	19.30	33.17	4.63	23.57	433.0	0.000
10	19.30	33.19	4.97	10	19.30	33.19	4.97	23.58	431.9	0.043
50	17.08	33.40	5.25	20	19.30	33.25	5.06	23.63	427.9	0.086
75	15.29	33.38	5.68	30	19.30	33.34	5.13	23.70	421.7	0.129
99	13.82	33.31	5.21	50	17.08	33.40	5.25	24.29	365.7	0.207
123	12.78	33.40	4.94	75	15.30	33.38	5.68	24.68	329.4	0.294
150	10.41	33.31	5.15	100	13.76	33.31	5.19	24.95	303.8	0.373
175	9.05	33.40	5.06	150	10.41	33.31	5.15	25.57	245.3	0.511
202	8.54	33.64	4.61	200	8.56	33.63	4.69	26.14	192.2	0.620
254	7.84	33.91	3.77	250	7.91	33.90	3.85	26.44	163.5	0.709
313	6.98	33.98	1.39	300	7.15	33.97	1.82	26.61	148.4	0.787

BLACK DOUGLAS; October 12, 1950; 1200 GCT; 33°33'N, 127°16.5'W; sounding, 2,415 fm; wind, 330°, force 2; weather, partly cloudy; sea, very rough; wire angle, 4°. 70.130K-6

0	19.54	33.24	4.98	0	19.54	33.24	4.98	23.56	433.6	0.000
19	19.54	33.26	5.17	10	19.53	33.25	5.11	23.57	433.2	0.043
51	18.08	33.46	4.79	20	19.54	33.26	5.17	23.58	433.0	0.087
76	15.74	33.42	5.26	30	19.55	33.34	5.06	23.63	427.8	0.130
101	13.88	33.32	5.18	50	18.50	33.46	4.79	23.99	394.4	0.212
119	12.16	33.33	4.66	75	15.80	33.42	5.24	24.60	337.0	0.303
150	10.42	33.42	4.41	100	14.00	33.32	5.18	24.91	307.8	0.384
178	9.31	33.51	4.15	150	10.42	33.42	4.41	25.67	236.2	0.520
201	8.68	33.77	4.04	200	8.71	33.76	4.05	26.21	184.9	0.625
250	7.93	33.86	3.15	250	7.93	33.86	3.15	26.41	166.8	0.713
298	7.35	33.94	2.76	300	7.32	33.94	2.75	26.56	153.0	0.793
398	6.12	33.98	1.97	400	6.13	33.98	1.95	26.75	135.4	0.937
495	5.39	34.02	1.33	500	5.34	34.02	1.30	26.88	123.7	1.067
602	4.80	34.09	0.85	600	4.81	34.09	0.85	27.00	113.2	1.185
757	4.29	34.25	0.48	700	4.44	34.19	0.58	27.12	102.3	1.292
1041	3.62	34.40	0.72	800	4.17	34.29	0.47	27.23	92.6	1.390
				1000	3.71	34.39	0.66	27.35	81.5	1.565

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70.130K-7 BLACK DOUGLAS; October 12, 1950; 1500 GCT; 33°33'N, 127°16.5'W; sounding, 2,415 fm; wind, 340°, force 1; weather, partly cloudy; sea, very rough; wire angle, 2°.

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
0	19.24	33.16	4.02		0	19.24	33.16	4.02		23.57	432.5	0.000
10	19.24	33.12	4.73		10	19.24	33.12	4.73		23.54	435.8	0.043
50	18.78	33.42	4.27		20	19.24	33.14	4.67		23.56	434.4	0.087
77	15.95	33.33	4.75		30	19.24	33.25	4.52		23.65	426.7	0.130
101	14.43	33.42	4.27		50	18.78	33.42	4.27		23.91	402.0	0.213
123	12.08	33.24	4.66		75	16.04	33.34	4.73		24.48	348.1	0.307
157p	11.16	33.24	4.53		100	14.63	33.42	4.27		24.85	313.2	0.389
194p	8.93	33.55	3.84		150	11.36	33.23	4.57		25.35	266.3	0.534
259p	7.96	33.84	2.82		200	8.75	33.59	3.74		26.08	198.0	0.650
					250	8.04	33.81	2.95		26.36	172.1	0.742
					300	(7.52)	(33.93)			(26.52)	(156.5)	(0.825)

70.130K-8 BLACK DOUGLAS; October 12, 1950; 1800 GCT; 33°33'N, 127°16.5'W; sounding, 2,415 fm; wind, 320°, force 1; weather, partly cloudy; sea, very rough; wire angle, 3°.

0	19.44	33.19	5.31	0	19.44	33.19	5.31		23.55	435.0	0.000
10	19.36	33.19	5.33	10	19.36	33.19	5.33		23.57	433.4	0.043
50	19.24	33.17	5.18	20	19.35	33.19	5.29		23.57	433.4	0.087
74	14.59	33.01	6.31	30	19.34	33.18	5.25		23.57	434.3	0.130
99	13.19	33.12	5.89	50	19.24	33.17	5.18		23.58	433.4	0.217
123	11.34	32.90	5.67	75	14.60	33.01	6.31		24.55	341.9	0.314
153	9.79	33.04	5.47	100	13.15	33.12	5.87		24.93	305.9	0.395
177	9.41	33.28	4.88	150	9.88	33.00	5.50		25.43	258.4	0.536
205	8.98	33.53	4.43	200	9.08	33.48	4.49		25.94	211.2	0.653
259	8.28	33.89	2.61	250	8.40	33.85	2.86		26.33	174.4	0.749
318	7.48	34.00	2.38	300	7.72	33.98	2.39		26.54	155.7	0.832

70.130K-9 BLACK DOUGLAS; October 12, 1950; 2100 GCT; 33°33'N, 127°16.5'W; sounding, 2,415 fm; wind, 320°, force 1; weather, partly cloudy; sea, very rough; wire angle, 3°.

0	19.46	33.15	5.10	0	19.46	33.15	5.10		23.52	438.1	0.000
10	19.33	33.17	5.15	10	19.33	33.17	5.15		23.56	434.6	0.044
49	16.70	32.99	5.86	20	19.34	33.14	5.35		23.54	436.8	0.087
74	14.18	33.06	5.86	30	19.34	33.07	5.55		23.48	442.2	0.131
98	11.97	32.95	5.79	50	16.55	32.99	5.84		24.10	384.0	0.214
121	10.45	32.99	5.53	75	14.13	33.06	5.83		24.68	328.8	0.303
150	9.58	33.31	5.07	100	11.78	32.95	5.81		25.06	293.2	0.381
174	9.01	33.51	4.21	150	9.58	33.31	5.07		25.72	231.4	0.512
203	8.55	33.75	3.28	200	8.59	33.73	3.29		26.21	185.3	0.616
255	7.88	33.96	3.18	250	7.94	33.95	3.19		26.48	160.3	0.703
315	7.22	34.00	2.29	300	7.40	34.00	2.52		26.60	149.7	0.780

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

BLACK DOUGLAS; October 13, 1950; 0000 GCT; 33°33'N, 127°16.5'W; sounding, 2,415 fm; wind, 320°, force 1; weather, partly cloudy; sea, very rough; wire angle, 1°. 70.130K-10

0	19.85	33.15	5.26	0	19.85	33.15	5.26	23.41	448.0	0.000
10	19.32	33.15	5.10	10	19.32	33.15	5.10	23.54	436.0	0.044
50	16.87	32.97	5.73	20	19.34	33.12	5.13	23.52	438.3	0.088
75	14.41	33.03	5.79	30	19.33	33.06	5.29	23.48	442.7	0.132
99	11.99	32.95	5.73	50	16.87	32.97	5.73	24.00	393.0	0.216
123	10.67	32.94	5.36	75	14.41	33.03	5.79	24.61	336.2	0.307
152	9.62	33.17	5.17	100	11.94	32.95	5.73	25.03	296.0	0.386
176	9.24	33.40	4.82	150	9.69	33.12	5.19	25.56	246.5	0.521
199	8.88	33.60	4.27	200	8.85	33.60	4.25	26.07	198.8	0.632
246	8.23	33.86	2.82	250	8.19	33.87	2.77	26.38	169.8	0.725
293	7.60	33.96	2.42	300	7.50	33.97	2.37	26.56	153.3	0.806
394	6.23	33.99	1.81	400	6.18	33.99	1.77	26.75	135.3	0.950
489	5.47	34.02	1.13	500	5.42	34.03	1.06	26.88	124.0	1.080
594	4.96	34.16	0.53	600	4.95	34.17	0.51	27.05	108.9	1.196
749	4.45	34.25	0.32	700	4.60	34.23	0.34	27.13	101.3	1.300
1033	3.70	34.43	0.46	800	4.31	34.27	0.31	27.20	95.8	1.399
				1000	3.78	34.40	0.44	27.35	81.6	1.577

BLACK DOUGLAS; October 13, 1950; 0300 GCT; 33°33'N, 127°16.5'W; sounding, 2,415 fm; wind, 320°, force 1; weather, overcast; sea, very rough; wire angle, 4°. 70.130K-11

0	19.66	4.48	0	19.65	4.48
10	19.32	4.68	10	19.32	4.68
50	16.58	5.39	20	18.87	4.90
76	14.09	5.34	30	18.29	5.11
100	12.24	5.34	50	16.56	5.39
123	10.91	4.75	75	14.20	5.35
149	9.79	4.94	100	12.24	5.34
176	9.34	4.16	150	9.74	4.94
203	8.74	3.59	200	8.80	3.64
256	8.01	2.54	250	8.10	2.69
313	7.36	1.98	300	7.49	2.08

BLACK DOUGLAS; October 13, 1950; 0600 GCT; 33°33'N, 127°16.5'W; sounding, 2,415 fm; wind, 320°, force 1; weather, overcast; sea, rough; wire angle, 5°. 70.130K-12

0	19.48	33.10	5.38	0	19.48	33.10	5.38	23.47	442.7	0.000
10	19.31	33.12	5.25	10	19.31	33.12	5.25	23.53	437.0	0.044
50	19.02	33.10	5.23	20	19.30	33.12	5.22	23.53	437.3	0.088
75	14.75	32.97	6.06	30	19.30	33.12	5.22	23.53	437.6	0.131
99	13.13	33.03	4.68	50	19.02	33.10	5.23	23.58	433.2	0.219
124	11.11	32.88	5.87	75	14.75	32.97	6.06	24.47	348.9	0.316
153	9.71	33.06	6.04	100	13.05	33.03	4.70	24.88	310.6	0.399
176	9.18	33.39	4.58	150	9.86	33.02	6.06	25.45	256.6	0.541
205	8.75	33.58	3.59	200	8.82	33.56	3.68	26.06	201.3	0.655
258	8.12	33.86	2.71	250	8.23	33.83	2.84	26.34	173.4	0.748
318	7.39	33.97	2.14	300	7.62	33.95	2.28	26.53	156.5	0.831

BLACK DOUGLAS; October 13, 1950; 0900 GCT; 33°33'N, 127°16.5'W; sounding, 2,415 fm; wind, 310°, force 1; weather, partly cloudy; sea, rough; wire angle, 5°. 70.130K-13

0	19.41	33.06	5.58	0	19.41	33.06	5.58	23.46	443.9	0.000
10	19.40	33.12	5.49	10	19.40	33.12	5.49	23.51	439.4	0.044
50	16.90	33.12	6.06	20	19.40	33.12	5.55	23.51	439.7	0.088
74	14.12	33.00	6.29	30	19.40	33.12	5.71	23.51	440.1	0.132
98	12.82	33.01	6.08	50	16.90	33.12	6.06	24.11	382.5	0.214
122	11.03	32.92	5.80	75	14.04	33.00	6.28	24.66	331.4	0.304
151	9.59	33.13	5.24	100	12.60	33.01	6.06	24.95	303.7	0.383
174	9.04	33.46	4.42	150	9.64	33.10	5.23	25.55	247.2	0.521
203	8.58	33.71	3.63	200	8.61	33.69	3.70	26.17	188.5	0.629
256	8.02	33.93	2.67	250	8.10	33.92	2.76	26.43	164.8	0.718
314	7.32	33.96	2.53	300	7.51	33.96	2.53	26.55	154.2	0.798

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

70.130K-14 BLACK DOUGLAS; October 13, 1950; 1200 GCT; 33°33'N, 127°16.5'W; sounding, 2,415 fm; wind, 310°, force **1**; weather, overcast; sea, rough; wire angle, 2°.

0	19.38	33.12	5.05	0	19.38	33.12	5.05	23.51	438.8	0.000
10	19.34	33.10	5.17	10	19.34	33.10	5.17	23.51	439.4	0.044
50	18.08	33.03	5.59	20	19.33	33.08	5.27	23.49	440.9	0.088
75	14.07	33.03	6.17	30	19.33	33.06	5.36	23.48	442.7	0.132
101	12.53	32.95	5.98	50	18.08	33.03	5.59	23.77	415.7	0.218
125	10.82	32.88	5.69	75	14.07	33.03	6.17	24.67	330.2	0.311
154	9.73	33.05	5.28	100	12.60	32.96	5.98	24.91	307.3	0.391
179	9.33	33.31	4.75	150	9.77	33.00	5.35	25.45	256.6	0.532
197	8.74	33.62	4.63	200	8.69	33.66	4.58	26.14	192.0	0.644
250	8.14	33.89	2.86	250	8.14	33.89	2.86	26.40	167.6	0.733
298	7.37	33.93	3.05	300	7.35	33.93	3.04	26.55	154.1	0.814
399	6.17	34.00	1.79	400	6.16	34.00	1.79	26.76	134.3	0.959
496	5.42	34.07	1.08	500	5.40	34.08	1.05	26.92	120.0	1.086
600	4.86	34.16	0.52	600	4.86	34.16	0.52	27.05	108.4	1.200
754	4.32	34.34	0.35	700	4.46	34.28	0.37	27.19	95.9	1.301
1039	3.68	34.43	0.62	800	4.19	34.37	0.38	27.29	87.0	1.393
				1000	3.76	34.43	0.58	27.38	79.2	1.560

70.130K-15 BLACK DOUGLAS; October 13, 1950; 1500 GCT; 33°33'N, 127°16.5'W; sounding, 2,415 fm; wind, 310°, force 2; weather, cloudy; sea, rough; wire angle, 3°.

0	19.30	33.12	4.67	0	19.30	33.12	4.67	23.53	436.7	0.000
10	19.30	33.11	5.28	10	19.30	33.11	5.28	23.52	437.7	0.044
51	15.72	32.97	6.79	20	19.30	33.08	5.70	23.50	440.2	0.088
75	13.49	33.12	6.10	30	19.30	33.03	6.20	23.46	444.2	0.132
100	11.70	32.94	5.80	50	15.96	32.97	6.78	24.22	372.6	0.213
123	10.61	32.97	5.69	75	13.49	33.12	6.10	24.85	313.0	0.299
154	9.62	33.08	5.44	100	11.70	32.94	5.80	25.07	292.5	0.375
178	9.24	33.35a)	4.79	150	9.69	33.06	5.49	25.51	250.9	0.511
205	8.64	33.69a)	3.72	200	8.72	33.64	3.77	26.12	193.9	0.622
258	7.95	33.95	3.61	250	8.07	33.94	3.62	26.45	162.9	0.711
317	7.03	33.95	2.71	300	7.34	33.95	3.04	26.57	152.5	0.789

70.130K-16 BLACK DOUGLAS; October 13, 1950; 1800 GCT; 33°33'N, 127°16.5'W; sounding, 2,415 fm; wind, 310°, force 1; weather, intermittent light drizzle; sea, rough; wire angle, 4°.

0	19.35	33.15	4.44	0	19.35	33.15	4.44	23.54	435.4	0.000
10	19.32	33.12	4.31	10	19.32	33.12	4.31	23.53	437.5	0.044
50	19.22	33.17	4.75	20	19.32	33.12	4.38	23.53	437.8	0.087
76	14.88	32.97	4.94	30	19.32	33.13	4.50	23.53	437.4	0.131
100	14.13	33.26	3.76	50	19.22	33.17	4.75	23.58	433.2	0.218
124	12.41	33.15	4.70	75	15.07	32.97	4.95	24.41	354.5	0.317
152	9.97	33.13	3.66	100	14.13	33.26	3.76	24.84	314.6	0.400
176	9.25	33.28	4.31	150	10.08	33.13	3.68	25.50	252.0	0.542
205	8.43	33.58	3.91	200	8.56	33.54	3.99	26.07	198.9	0.655
260	7.88	33.89	3.37	250	7.95	33.86	3.45	26.41	167.1	0.746
318	7.20	33.95	3.09	300	7.42	33.94	3.16	26.55	154.4	0.827

70.130K-17 BLACK DOUGLAS; October 13, 1950; 2100 GCT; 33°33'N, 127°16.5'W; sounding, 2,415 fm; wind, 310°, force 2; weather, intermittent light drizzle; sea, rough; wire angle, 10°.

0	19.47	33.15	5.36	0	19.47	33.15	5.36	23.51	438.4	0.000
10	19.33	33.10	5.53	10	19.33	33.10	5.53	23.50	439.7	0.044
49	16.53	33.01	6.10	20	19.35	33.08	5.67	23.49	441.4	0.088
73	13.72	32.92	6.30	30	19.35	33.07	5.82	23.48	442.5	0.132
98	12.18	32.94	6.12	50	16.23	33.00	6.11	24.18	376.3	0.214
122	11.11	-	-	75	13.63	32.92	6.29	24.68	329.2	0.302
151	10.12	33.24	5.48	100	12.11	32.94	6.10	24.99	299.8	0.381
176	9.45	33.35	5.04	150	10.19	33.24	5.48	25.57	245.7	0.517
205	8.93	33.60	4.30	200	9.02	33.54	4.45	25.99	205.9	0.630
259	7.84	33.84	3.71	250	7.99	33.82	3.79	26.37	170.6	0.725
318	7.18	33.95	3.05	300	7.31	33.93	3.23	26.55	153.6	0.805

a) Salinity samples at 178 and 205 meters appear to have been reversed; they are assumed to be in the order listed.

BLACK DOUGLAS; October 14, 1950; 0000 GCT; 33°33'N, 127°16.5'W; sounding, 2,415 fm; wind, 320°, force 2; weather, overcast; sea, rough; wire angle, 7°. 70.130K-18

OBSERVED Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	INTERPOLATED Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	COMPUTED σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m
0	19.49	33.16	5.20		0	19.49	33.16	5.20		23.52	437.6	0.000
10	19.46	33.15	5.36		10	19.46	33.15	5.36		23.52	438.5	0.044
50	17.55	33.37	5.83		20	19.45	33.20	5.49		23.55	435.2	0.087
74	15.59	33.33	5.90		30	19.45	33.26	5.62		23.60	431.1	0.131
98	14.38	33.36	5.80		50	17.55	33.37	5.83		24.15	378.8	0.212
122	12.24	33.22	5.73		75	15.54	33.33	5.90		24.59	338.1	0.301
150	10.90	33.31	5.65		100	14.30	33.36	5.80		24.88	310.9	0.383
174	-	33.37	4.92		150	10.90	33.31	5.65		25.50	252.4	0.523
197	8.57	33.62	4.57		200	8.52	33.66	4.57		26.17	189.4	0.634
241	8.01	33.87	4.64		250	7.93	33.88	4.65		26.43	165.3	0.723
287	7.39	33.91	4.58		300	7.18	33.92	4.52		26.57	152.5	0.802
385	6.16	34.06	2.18		400	6.04	34.07	1.90		26.83	127.6	0.942
477	5.41	34.05	1.21		500	5.30	34.06	1.07		26.92	120.3	1.066
580	4.88	34.13	0.73		600	4.80	34.15	0.66		27.05	108.6	1.180
730	4.42	34.26	0.39		700	4.50	34.24	0.41		27.15	99.3	1.283
1010	3.71	34.42	0.59		800	4.28	34.31	0.40		27.23	92.5	1.379
					1000	3.74	34.42	0.57		27.37	79.7	1.552

BLACK DOUGLAS; October 14, 1950; 0300 GCT; 33°33'N, 127°16.5'W; sounding, 2,415 fm; wind, 310°, force 2; weather, overcast; sea, moderate; wire angle, 5°. 70.130K-19

0	19.42	33.16	5.18		0	19.42	33.16	5.18		23.53	436.4	0.000
10	19.43	33.17	5.31		10	19.43	33.17	5.31		23.54	436.0	0.044
50	16.62	32.95	6.08		20	19.42	33.14	5.52		23.52	438.8	0.087
74	14.03	33.03	6.06		30	19.42	33.06	5.77		23.46	444.9	0.132
99	12.21	32.92	6.02		50	16.62	32.95	6.08		24.05	388.4	0.215
123	10.63	32.86	5.56		75	13.90	33.03	6.06		24.71	326.5	0.304
152	9.63	33.12	4.75		100	12.20	32.91	6.02		24.95	303.7	0.383
176	9.29	33.31	5.35r		150	9.70	33.07	4.79		25.52	250.3	0.521

BLACK DOUGLAS; October 14, 1950; 0600 GCT; 33°33'N, 127°16.5'W; sounding, 2,415 fm; wind, 310°, force 3; weather, cloudy; sea, moderate; wire angle, 5°. 70.130K-20

0	19.38	33.17	5.35		0	19.38	33.17	5.35		23.55	435.0	0.000
10	19.40	33.17	5.33		10	19.40	33.17	5.33		23.54	435.8	0.044
50	17.28	33.01	5.72		20	19.41	33.17	5.38		23.54	436.4	0.087
75	14.47	33.00	6.23		30	19.41	33.13	5.49		23.51	439.6	0.131
99	12.51	32.94	6.12		50	17.28	33.01	5.72		23.94	399.1	0.215
124	11.01	32.95	5.61		75	14.47	33.00	6.23		24.57	339.6	0.307
151	9.81	33.06	5.44		100	12.49	32.94	6.13		24.92	306.8	0.388
175	9.15	33.30	5.01		150	9.90	33.05	5.45		25.47	255.0	0.528
205	8.71	33.60	3.83		200	8.80	33.56	4.10		26.04	201.0	0.642
258	8.14	33.90	2.75		250	8.24	33.87	2.82		26.37	170.6	0.735
316	7.32	33.96	2.54		300	7.56	33.96	2.59		26.54	154.9	0.817

BLACK DOUGLAS; October 14, 1950; 0900 GCT; 33°33'N, 127°16.5'W; sounding, 2,415 fm; wind, 280°, force 2; weather, cloudy; sea, moderate; wire angle, 3°. 70.130K-21

0	19.30	33.15	5.14		0	19.30	33.15	5.14		23.55	434.5	0.000
10	19.33	33.16	5.35		10	19.33	33.16	5.35		23.55	434.8	0.043
90p	10.49	32.86r	5.67u		20	(19.33)	(33.15)	(5.51)		(23.55)	(435.9)	(0.087)
103	-	32.99	5.99		30	(19.33)	(33.11)	(5.61)		(23.52)	(439.1)	(0.131)
129p	9.52	33.11	5.26		50	(16.85)	(33.01)	(5.73)		(24.04)	(389.2)	(0.214)
210p	8.56	33.71	3.52		75	(13.00)	(32.96)	(5.82)		(24.83)	(314.2)	(0.301)
264p	8.03	33.89	3.22		100	10.10	32.98	5.96		25.38	262.4	(0.374)
					150	9.23	33.23	4.65		25.72	231.1	(0.497)
					200	8.66	33.64	3.69		26.13	193.0	(0.602)
					250	8.18	33.86	3.26		26.37	170.4	(0.694)
					300	(7.61)	(33.92)			(26.50)	(158.6)	(0.776)

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

70J30K-22 BLACK DOUGLAS; October 14, 1950; 1200 GCT; 33°33'N, 127°16.5'W; sounding, 2,415 fm; wind, 280°, force 2; weather, overcast; sea, moderate; wire angle, 15°.

0	19.34	33.17	3.82	0	19.34	33.17	3.82	23.56	434.0	0.000
11	19.34	33.15	4.92	10	19.34	33.15	4.91	23.54	435.8	0.044
46	16.06	32.97	4.77	20	19.33	33.10	4.90	23.51	439.5	0.087
73	14.09	33.06	4.58	30	19.33	33.02	4.85	23.45	445.6	0.131
97	12.12	32.93	5.27	50	15.55	32.98	4.74	24.32	363.1	0.212
121	10.62	32.94	4.86	75	13.90	33.06	4.57	24.73	324.3	0.298
146	9.68	33.13	4.06	100	11.94	32.93	5.27	25.02	297.5	0.376
173	–	33.31	4.41	150	9.60	33.17	4.07	25.61	241.3	0.511
196	8.81	33.55	2.92	200	8.78	33.60	2.92	26.08	197.8	0.620
243	8.17	33.91	3.07	250	8.10	33.93	2.97	26.44	164.1	0.711
291	7.67	33.98	2.01	300	7.58	33.98	1.93	26.56	153.7	0.790
389	6.24	34.04	1.64	400	6.13	34.05	1.60	26.81	130.2	0.932
484	5.42	34.09	1.05	500	5.30	34.10	0.95	26.95	117.3	1.056
587	4.88	34.16	0.58	600	4.83	34.17	0.55	27.06	107.5	1.169
736	4.41	34.29	0.31	700	4.52	34.26	0.35	27.16	98.1	1.271
1021	3.70	34.43	0.58	800	4.22	34.33	0.33	27.25	90.3	1.365
				1000	3.73	34.42	0.56	27.37	79.6	1.535

70J30K-23 BLACK DOUGLAS; October 14, 1950; 1500 GCT; 33°33'N, 127°16.5'W; sounding, 2,415 fm; wind, 310°, force 2; weather, partly cloudy; sea, moderate; wire angle, 9°.

0	19.35	33.13	5.24	0	19.35	33.13	5.24	23.53	437.1	0.000
10	19.34	33.19	5.40	10	19.34	33.19	5.40	23.57	433.1	0.044
49	16.40	33.03	6.05	20	19.35	33.18	5.59	23.56	434.2	0.087
74	13.72	33.01	6.23	30	19.36	33.12	5.76	23.52	439.1	0.131
99	12.27	33.04	5.95	50	16.25	33.03	6.05	24.20	374.5	0.212
123	10.79	32.95	5.80	75	13.69	33.01	6.23	24.75	323.8	0.299
152	9.94	33.03	5.30	100	12.07	33.04	5.95	25.08	291.7	0.376
175	9.34	33.37	4.71	150	9.98	33.01	5.35	25.42	259.2	0.514
203	8.78	33.60	2.67	200	8.84	33.58	2.71	26.05	200.2	0.628
255	8.02	33.95	2.65	250	8.09	33.94	2.66	26.45	163.2	0.720
314	7.38	33.98	2.19	300	7.52	33.98	2.32	26.56	152.8	0.798

70J30K-24 BLACK DOUGLAS; October 14, 1950; 1800 GCT; 33°33'N, 127°16.5'W; sounding, 2,415 fm; wind, 310°, force 1; weather, cloudy; sea, moderate; wire angle, 4°.

0	19.38	33.22	4.99	0	19.38	33.22	4.99	23.59	431.3	0.000
10	19.36	33.15	5.27	10	19.36	33.15	5.27	23.54	436.5	0.043
50	19.34	33.22	5.23	20	19.36	33.16	5.26	23.55	435.9	0.087
74	14.47	32.99	5.10	30	19.35	33.19	5.26	23.57	433.8	0.130
99	12.80	33.01	5.90	50	19.34	33.22	5.23	23.60	432.0	0.217
122	11.07	32.94	5.69	75	14.40	32.99	5.10	24.57	339.3	0.314
151	9.98	33.08	5.47	100	12.71	33.01	5.90	24.93	305.7	0.394
174	9.38	33.37	5.05	150	10.02	33.07	5.47	25.46	255.5	0.534
203	8.76	33.68	3.77	200	8.80	33.65	3.91	26.11	194.4	0.647
257	8.08	33.93	2.78	250	8.15	33.91	2.87	26.42	166.3	0.736
316	7.38	34.04	2.44	300	7.58	34.02	2.47	26.59	150.7	0.816

70J30K-25 BLACK DOUGLAS; October 14, 1950; 2100 GCT; 33°33'N, 127°16.5'W; sounding, 2,415 fm; wind, 320°, force 1; weather, cloudy; sea, moderate; wire angle, 4°.

0	19.55	33.17	5.41	0	19.55	33.17	5.41	23.50	439.1	0.000
10	19.37	33.15	5.35	10	19.37	33.15	5.35	23.54	436.5	0.044
50	19.23	33.17	5.39	20	19.37	33.15	5.35	23.54	436.8	0.087
75	14.29	32.97	6.20	30	19.37	33.16	5.36	23.54	436.4	0.131
99	12.87	33.01	5.83	50	19.23	33.17	5.39	23.58	433.2	0.218
123	10.73	32.94	5.53	75	14.29	32.97	6.20	24.58	338.4	0.315
152	9.67	33.17	5.21	100	12.78	33.01	5.82	24.92	307.0	0.395
176	9.14	33.49	4.81	150	9.70	33.12	5.24	25.56	246.6	0.534
205	8.74	33.69	3.65	200	8.81	33.65	3.86	26.11	194.5	0.644
258	7.98	33.98	2.71	250	8.09	33.97	2.82	26.47	161.0	0.732
317	7.28	34.00	2.32	300	7.48	34.00	2.40	26.59	150.8	0.811

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
BLACK DOUGLAS; October 15, 1950; 0000 GCT; 33°33'N, 127°16.5'W; sounding, 2,415 fm; wind, 230°, force 3; weather, intermittent slight drizzle; sea, moderate; wire angle, 5°.													70.130K-26
0	19.65	33.19	5.09		0	19.65	33.19	5.09		23.49	440.1	0.000	
10	19.40	33.19	5.14		10	19.40	33.19	5.14		23.56	434.3	0.044	
51	19.29	33.24	5.08		20	19.40	33.20	5.15		23.57	433.9	0.087	
75	14.53	33.01	5.96		30	19.40	33.22	5.12		23.58	432.8	0.130	
99	12.67	33.01	6.16		50	19.38	33.24	5.08		23.60	431.5	0.217	
123	10.97	32.94	5.61		75	14.53	33.01	5.96		24.56	340.7	0.313	
153	9.69	33.17	5.31		100	12.60	33.01	6.16		24.95	303.7	0.394	
176	9.32	33.33	4.71		150	9.78	33.12	5.33		25.54	247.9	0.532	
200	8.86	33.66	4.20		200	8.86	33.66	4.20		26.11	194.8	0.642	
248	8.27	33.93	2.82		250	8.25	33.94	2.79		26.43	165.5	0.732	
294	7.58	33.98	2.47		300	7.50	33.98	2.44		26.57	152.6	0.812	
396	6.45	34.07	1.40		400	6.40	34.08	1.37		26.80	131.6	0.954	
492	5.81	34.14	0.81		500	5.50	34.15	0.78		26.96	116.1	1.078	
598	4.90	34.22	0.59		600	4.90	34.22	0.59		27.09	104.6	1.169	
752	4.36	34.33	0.32		700	4.51	34.30	0.36		27.20	95.0	1.287	
1036	3.64	34.43	0.69		800	4.23	34.36	0.32		27.28	88.2	1.379	
					1000	3.71	34.42	0.61		27.38	79.3	1.547	
BLACK DOUGLAS; October 15, 1950; 0300 GCT; 33°33'N, 127°16.5'W; sounding, 2,415 fm; wind, 230°, force 1; weather, overcast; sea, slight; wire angle, 0°.													70.130K-27
0	19.59	33.17	5.23		0	19.59	33.17	5.23		23.50	440.1	0.000	
10	19.40	33.22	5.25		10	19.40	33.22	5.25		23.58	432.2	0.044	
51	16.68	33.03	6.08		20	19.40	33.19	5.34		23.56	434.7	0.087	
76	13.68	33.01	6.30		30	19.40	33.12	5.52		23.51	440.1	0.131	
100	11.29	33.04	5.94		50	16.83	33.03	6.05		24.06	387.3	0.213	
123	10.68	32.95	5.75		75	13.77	33.01	6.31		24.72	325.4	0.302	
154	9.68	33.22	5.31		100	11.29	33.04	5.94		25.22	278.1	0.378	
176	9.30	33.36	4.96		150	9.76	33.18	5.38		25.59	243.1	0.508	
207	8.71	33.75	3.99		200	8.84	33.65	4.22		26.11	195.0	0.617	
260	8.00	33.95	2.68		250	8.15	33.93	2.90		26.43	164.8	0.708	
320	7.16	34.05	2.11		300	7.45	34.02	2.25		26.61	148.9	0.786	
BLACK DOUGLAS; October 15, 1950; 0600 GCT; 33°33'N, 127°16.5'W; sounding, 2,415 fm; wind, 200°, force 1; weather, partly cloudy; sea, slight; wire angle, 6°.													70.130K-28
0	19.50	33.21	4.28		0	19.50	33.21	4.28		23.55	435.0	0.000	
10	19.39	33.21	4.38		10	19.39	33.21	4.38		23.58	432.4	0.043	
50	17.14	32.99	4.21		20	19.38	33.18	4.38		23.56	434.9	0.087	
75	13.88	32.99	4.11		30	19.39	33.08	4.32		23.48	442.7	0.131	
99	12.28	32.97	4.98		50	17.14	32.99	4.21		23.96	397.1	0.215	
124	11.03	32.98	4.93		75	13.88	32.99	4.11		24.68	329.4	0.305	
152	9.83	33.08	-		100	12.20	32.97	4.98		25.00	299.2	0.384	
177	9.26	33.26	4.33		150	10.00	33.06	4.69		25.46	255.9	0.523	
205	8.92	33.60	3.65		200	9.00	33.55	3.80		26.00	204.8	0.638	
259	8.15	33.91	3.20		250	8.29	33.88	3.24		26.37	170.6	0.731	
318	7.32	34.02	1.77		300	7.59	33.99	2.22		26.56	153.1	0.813	
BLACK DOUGLAS; October 15, 1950; 0900 GCT; 33°33'N, 127°16.5'W; sounding, 2,415 fm; wind, 170°, force 1; weather, partly cloudy; sea, moderate; wire angle, 0°.													70.130K-29
0	19.46	33.24	5.38		0	19.46	33.24	5.38		23.58	431.6	0.000	
10	19.46	33.22	4.54		10	19.46	33.22	4.54		23.57	433.4	0.043	
50	18.09	33.07	5.64		20	19.45	33.18	4.69		23.54	436.6	0.087	
75	14.19	33.03	6.30		30	19.45	33.13	5.02		23.50	440.6	0.131	
100	12.12	32.92	6.00		50	18.09	33.07	5.64		23.79	413.1	0.216	
125	10.75	32.91	5.69		75	14.19	33.03	6.30		24.65	332.2	0.309	
154	9.74	33.08	5.30		100	12.12	32.92	6.00		24.97	301.7	0.388	
178	9.16	33.40	4.71		150	9.88	33.04	5.36		25.46	255.4	0.528	
206	8.72	33.69	4.31		200	8.80	33.63	4.39		26.10	195.8	0.640	
259	8.04	33.93	3.26		250	8.15	33.91	3.42		26.42	166.3	0.730	
317	7.28	33.99	2.28		300	7.50	33.98	2.50		26.57	152.6	0.811	

SIO

CCOFI 5010

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

70.130K-30 BLACK DOUGLAS; October 15, 1950; 1200 GCT; 33°33'N, 127°16.5'W; sounding, 2,415 fm; wind, 190°, force 2; weather, cloudy; sea, rough; wire angle, 5°.

0	19.46	33.15	5.26	0	19.46	33.15	5.26	23.52	437.9	0.000
10	19.47	33.18	5.39	10	19.47	33.18	5.39	23.54	436.0	0.044
50	19.28	33.16	5.44	20	19.45	33.18	5.41	23.54	436.6	0.087
74	14.73	33.01	6.12	30	19.45	33.18	5.42	23.54	436.9	0.131
109	12.69	32.97	6.07	50	19.28	33.16	5.44	23.56	435.1	0.218
123	11.34	32.96	5.60	75	14.70	33.01	6.13	24.52	344.0	0.316
152	9.63	33.13	5.24	100	13.20	32.98	6.18	24.81	317.2	0.398
179	9.16	33.46	4.63	150	9.69	33.10	5.26	25.54	247.9	0.540
200	8.69	33.70	3.66	200	8.69	33.70	3.66	26.18	188.4	0.648
248	8.03	33.90	2.80	250	8.01	33.90	2.78	26.43	165.0	0.736
296	7.54	33.95	2.38	300	7.48	33.95	2.33	26.55	154.5	0.817
397	6.42	34.04	1.53	400	6.40	34.04	1.50	26.76	134.5	0.962
493	5.77	34.13	0.74	500	5.72	34.14	0.71	26.93	119.6	1.088
599	5.24	34.20	0.47	600	5.23	34.20	0.46	27.04	110.1	1.204
753	4.42	34.25	0.33	700	4.69	34.24	0.36	27.13	101.6	1.308
				800	(4.23)	(34.26)		(27.20)	(95.6)	(1.407)

70.130K-31 BLACK DOUGLAS; October 15, 1950; 1500 GCT; 33°33'N, 127°16.5'W; sounding, 2,415 fm; wind, 290°, force 2; weather, overcast; sea, rough; wire angle, 7°.

0	19.41	33.15	4.97	0	19.41	33.15	4.97	23.53	437.2	0.000
10	19.42	33.19	4.94	10	19.42	33.19	4.94	23.56	434.6	0.044
50	19.30	33.17	4.97	20	19.42	33.19	4.96	23.55	435.2	0.087
75	14.21	32.97	5.57	30	19.42	33.19	4.96	23.55	435.5	0.131
99	12.49	32.92	6.32	50	19.30	33.17	4.97	23.57	434.4	0.218
123	11.10	32.88	5.65	75	14.21	32.97	5.57	24.60	336.8	0.314
153	9.89	33.17	4.81	100	12.44	32.92	6.31	24.91	307.3	0.394
175	9.25	33.35	4.66	150	9.88	33.11	4.87	25.52	250.2	0.534
201	8.92	33.62	4.30	200	8.94	33.62	4.31	26.07	198.7	0.646
258	8.03	33.87	2.27	250	8.13	33.86	2.34	26.38	169.7	0.738
317	7.31	33.96	2.24	300	7.49	33.94	2.24	26.54	155.4	0.820

70.130K-32 BLACK DOUGLAS; October 15, 1950; 1800 GCT; 33°33'N, 127°16.5'W; sounding, 2,415 fm; wind, 270°, force 3; weather, partly cloudy; sea, rough; wire angle, 8°.

0	19.67	33.28	5.12	0	19.67	33.28	5.12	23.56	433.8	0.000
10	19.66	33.24	5.39	10	19.66	33.24	5.39	23.53	436.8	0.044
49	16.45	32.99	6.32	20	19.65	33.18	5.67	23.49	441.5	0.087
74	14.03	32.99	6.18	30	19.65	33.09	5.97	23.42	448.4	0.132
99	12.49	33.03	5.96	50	16.28	32.99	6.32	24.16	378.1	0.215
123	10.71	32.98	5.71	75	14.03	32.99	6.16	24.65	331.9	0.303
153	9.63	33.15	5.47	100	12.42	33.03	5.95	25.00	298.9	0.382
177	9.45	33.39	4.76	150	9.67	33.11	5.49	25.55	246.9	0.518
206	8.76	33.68	3.79	200	8.85	33.62	3.95	26.08	197.4	0.629
258	8.04	33.95	2.74	250	8.14	33.93	2.79	26.43	164.7	0.721
317	7.28	34.00	2.77	300	7.50	34.00	2.75	26.58	151.1	0.799

70.130K-33 BLACK DOUGLAS; October 15, 1950; 2100 GCT; 33°33'N, 127°16.5'W; sounding, 2,415 fm; wind, 280°, force 3; weather, cloudy; sea, rough; wire angle, 7°.

0	19.69	33.22	5.34	0	19.69	33.22	5.34	23.51	438.7	0.000
10	19.64	33.26	5.38	10	19.64	33.26	5.38	23.55	435.1	0.044
50	18.09	33.11	5.83	20	19.64	33.25	5.42	23.54	436.2	0.087
74	14.02	32.99	6.26	30	19.64	33.22	5.52	23.52	438.7	0.131
99	12.41	32.99	6.00	50	18.09	33.11	5.83	23.83	410.2	0.216
123	10.72	32.92	5.69	75	14.00	32.99	6.26	24.66	331.4	0.309
153	9.63	33.11	4.91	100	12.42	32.99	5.99	24.97	301.8	0.388
176	9.15	33.37	4.55	150	9.74	33.06	5.00	25.50	251.7	0.526
206	8.66	33.71	4.42	200	8.75	33.66	4.43	26.13	192.9	0.637
260	8.08	33.92	3.11	250	8.19	33.90	3.46	26.40	167.6	0.727
318	7.30	33.96	2.70	300	7.56	33.96	2.77	26.54	154.9	0.808

BLACK DOUGLAS; October 16, 1950; 0000 GCT; 33°33'N, 127°16.5'W; sounding, 2,415 fm; wind, 300°, force 4; weather, cloudy; sea, very rough; wire angle, 16°. 70.130K-34

OBSERVED Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	INTERPOLATED Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	COMPUTED σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m
0	20.03	33.36	4.87		0	20.03	33.36	4.87		23.53	437.2	0.000
10	19.99	33.35	4.23		10	19.99	33.35	4.23		23.53	436.8	0.044
48	19.46	33.21	4.54		20	19.97	33.33	4.27		23.52	438.5	0.087
73	14.49	33.01	2.56r		30	19.96	33.30	4.36		23.50	440.8	0.131
95	12.53	32.99	5.01		50	17.72	33.19	4.56		23.98	395.8	0.215
120	10.92	32.93	5.27		75	14.30	33.01	4.81		24.61	335.9	0.307
148	9.80	33.08	5.21		100	12.21	32.98	5.08		25.00	298.7	0.386
171	9.35	33.35	4.16		150	9.73	33.10	5.19		25.54	248.6	0.523
194	8.88	33.49	4.03		200	8.80	33.56	4.00		26.04	201.0	0.635
239	8.52	33.87	3.83		250	8.37	33.90	3.70		26.38	170.3	0.727
286	7.72	33.92	2.47		300	7.49	33.93	2.22		26.53	156.1	0.809
383	6.38	34.00	1.75		400	6.17	34.01	1.67		26.77	133.7	0.955
475	5.50	34.04	1.06		500	5.35	34.06	0.88		26.91	120.9	1.082
576	5.00	34.16	0.56		600	4.89	34.18	0.52		27.06	107.4	1.196
726	4.44	34.25	0.47		700	4.52	34.24	0.47		27.15	99.6	1.299
1010	3.76	34.29	0.81		800	4.22	34.27	0.55		27.20	94.7	1.396
					1000	3.78	34.29	0.80		27.27	89.7	1.580

BLACK DOUGLAS; October 16, 1950; 0300 GCT; 33°33'N, 127°16.5'W; sounding, 2,415 fm; wind, 290°, force 3; weather, partly cloudy; sea, rough; wire angle, 5°. 70.130K-35

0	20.15	33.41	5.13		0	20.15	33.41	5.13		23.54	436.5	0.000
10	20.12	33.39	5.12		10	20.12	33.39	5.12		23.52	438.1	0.044
50	19.02	33.33	6.01		20	20.00	33.38	5.26		23.55	436.0	0.087
75	14.74	33.04	5.86		30	19.86	33.37	5.57		23.58	433.6	0.131
99	12.60	32.97	5.78		50	19.02	33.33	6.01		23.76	417.0	0.216
123	10.73	32.88	5.52		75	14.74	33.04	5.86		24.54	342.5	0.311
153	9.69	33.14	5.00		100	12.56	32.96	5.77		24.92	306.8	0.392
176	9.04	33.40	4.70		150	9.82	33.07	5.05		25.50	252.5	0.532
204	8.90	33.71	4.12		200	8.90	33.68	4.22		26.12	193.9	0.643
258	7.98	33.93	2.65		250	8.11	33.92	2.75		26.43	165.2	0.733
319	7.10	33.96	2.37		300	7.37	33.95	2.43		26.56	152.9	0.813

BLACK DOUGLAS; October 16, 1950; 0600 GCT; 33°33'N, 127°16.5'W; sounding, 2,415 fm; wind, 280°, force 3; weather, overcast; sea, rough; wire angle, 9°. 70.130K-36

0	19.74	33.28	5.23		0	19.74	33.28	5.23		23.54	435.8	0.000
10	19.74	33.24	5.30		10	19.74	33.24	5.30		23.51	439.0	0.044
49	16.24	32.99	5.68		20	19.65	33.12	5.38		23.44	445.9	0.088
74	14.12	32.99	6.23		30	19.47	33.05	5.48		23.43	446.9	0.133
98	12.96	33.07	5.97		50	16.10	32.99	5.70		24.20	374.2	0.215
123	11.14	32.88	5.81		75	14.08	32.99	6.24		24.64	332.9	0.303
151	9.90	33.03	5.40		100	12.87	33.07	5.95		24.95	304.3	0.383
175	9.38	33.30	4.51		150	9.93	33.02	5.42		25.44	257.7	0.523
203	8.74	33.58	4.19		200	8.80	33.55	4.20		26.04	201.8	0.638
256	8.09	33.89	3.87		250	8.16	33.86	3.92		26.38	170.1	0.731
315	7.50	33.96	2.65		300	7.65	33.96	2.96		26.53	156.2	0.813

BLACK DOUGLAS; October 16, 1950; 0900 GCT; 33°33'N, 127°16.5'W; sounding, 2,415 fm; wind, 220°, force 5; weather, overcast; sea, very rough; wire angle, 13°. 70.130K-37

0	19.63	33.28	5.22		0	19.63	33.28	5.22		23.57	433.4	0.000
10	19.63	33.28	5.32		10	19.63	33.28	5.32		23.57	433.7	0.043
49	19.33	33.21	5.20		20	19.63	33.28	5.32		23.57	433.8	0.087
73	14.17	32.97	5.84		30	19.63	33.27	5.29		23.56	434.8	0.130
97	12.60	33.01	5.57		50	18.30	33.20	5.20		23.84	408.5	0.214
121	10.74	32.92	5.31		75	14.08	32.97	5.83		24.62	334.4	0.307
149	9.70	33.17	4.81		100	12.27	33.01	5.55		25.01	297.6	0.386
173	9.23	33.46	4.70		150	9.68	33.19	4.80		25.61	241.1	0.521
202	8.64	33.68	3.17		200	8.69	33.66	3.27		26.14	192.0	0.629
254	7.99	33.96	2.74		250	8.03	33.95	2.77		26.47	161.6	0.718
314	7.26	33.98	2.22		300	7.42	33.98	2.35		26.58	151.4	0.796

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

70.130K-38 BLACK DOUGLAS; October 16, 1950; 1200 GCT; 33°33'N, 127°16.5'W; sounding, 2,415 fm; wind, 270°, force 5; weather, cloudy; sea, very rough; wire angle, 17°.

2	19.47	33.21	5.39	0	19.47	33.21	5.39	23.56	434.0	0.000
10	19.46	33.21	5.48	10	19.46	33.21	5.48	23.56	434.1	0.043
49	18.76	33.15	5.75	20	19.45	33.21	5.56	23.56	434.4	0.087
72	14.32	33.01	5.86	30	19.46	33.21	5.62	23.56	435.0	0.130
96	12.09	32.97	6.11	50	17.80	33.14	5.74	23.92	401.2	0.214
119	10.86	33.04	5.71	75	14.10	33.00	5.90	24.64	332.6	0.306
142	9.64	33.22	5.34	100	11.91	32.97	6.09	25.05	294.0	0.384
170	9.27	33.39	4.91	150	9.51	33.27	5.20	25.70	232.5	0.515
193	8.89	33.64	4.68	200	8.77	33.69	4.59	26.15	190.9	0.621
239	8.22	33.86	2.96	250	8.08	33.90	2.84	26.42	166.0	0.711
282	7.67	34.00	2.54	300	7.43	34.02	2.38	26.61	148.6	0.789
378	6.61	34.05	1.55	400	6.41	34.06	1.38	26.78	133.2	0.930
470	5.86	34.12	0.96	500	5.72	34.15	0.81	26.94	118.8	1.056
578	5.37	34.22	0.51	600	5.24	34.23	0.47	27.06	108.0	1.170
720	4.50	34.30	0.39	700	4.60	34.29	0.40	27.18	96.8	1.272
999	3.70	34.43	0.63	800	4.16	34.35	0.44	27.27	88.1	1.365
				1000	(3.69)	(34.43)	(0.64)	(27.39)	(78.3)	(1.531)

70.130K-39 BLACK DOUGLAS; October 16, 1950; 1500 GCT; 33°33'N, 127°16.5'W; sounding, 2,415 fm; wind, 270°, force 5; weather, cloudy; sea, very rough; wire angle, 19°.

0	19.46	33.24	5.39	0	19.46	33.24	5.39	23.58	431.6	0.000
10	19.46	33.22	5.34	10	19.46	33.22	5.34	23.57	433.4	0.043
49	19.29	33.21	5.42	20	19.45	33.22	5.37	23.57	433.7	0.087
73	15.00	33.03	6.30	30	19.45	33.22	5.38	23.57	434.0	0.130
95	13.03	32.94	6.19	50	18.50	33.21	5.43	23.80	412.5	0.215
118	11.28	32.94	5.82	75	14.90	33.02	6.30	24.49	347.3	0.310
145	9.82	33.04	5.44	100	12.60	32.94	6.13	24.90	308.8	0.392
168	9.24	33.33	4.80	150	9.67	33.08	5.32	25.53	249.1	0.531
196	8.86	33.64	4.57	200	8.79	33.68	4.52	26.14	192.0	0.641
247	8.16	33.91	3.26	250	8.12	33.92	3.20	26.43	165.1	0.730
305	7.40	33.99	2.32	300	7.46	33.99	2.39	26.58	151.2	0.810

70.130K-40 BLACK DOUGLAS; October 16, 1950; 1800 GCT; 33°33'N, 127°16.5'W; sounding, 2,415 fm; wind, 270°, force 5; weather, partly cloudy; sea, very rough; wire angle, 15°.

0	19.80	33.30	5.40	0	19.80	33.30	5.40	23.54	436.1	0.000
10	19.80	33.33	5.41	10	19.80	33.33	5.41	23.56	434.2	0.044
49	19.02	33.19	5.59	20	19.81	33.32	5.44	23.55	435.3	0.087
74	15.22	33.06	6.30	30	19.81	33.28	5.48	23.52	438.5	0.131
97	12.91	32.94	6.02	50	18.35	33.19	5.60	23.82	410.4	0.216
120	11.62	32.97	5.92	75	15.05	33.06	6.30	24.49	347.5	0.310
147	10.13	33.04	5.60	100	12.73	32.94	6.00	24.87	311.2	0.393
170	9.55	33.26	5.16	150	10.07	33.05	5.55	25.44	257.7	0.535
197	9.05	33.51	4.66	200	9.01	33.53	4.60	25.99	206.5	0.651
247	8.34	33.86	3.02	250	8.30	33.88	2.98	26.37	170.7	0.745
305	7.53	34.00	2.61	300	7.60	33.99	2.63	26.56	153.2	0.826

70.130K-41 BLACK DOUGLAS; October 16, 1950; 2100 GCT; 33°33'N, 127°16.5'W; sounding, 2,415 fm; wind, 270°, force 5; weather, cloudy; sea, high; wire angle, 20°.

0	19.55	33.24	4.16	0	19.55	33.24	4.16	23.56	434.0	0.000
9	19.52	33.26	4.44	10	19.53	33.26	4.44	23.58	432.4	0.043
47	19.33	33.21	3.89	20	19.52	33.26	4.34	23.58	432.5	0.087
71	14.86	33.02	5.38	30	19.52	33.25	4.14	23.57	433.6	0.130
93	12.68	32.97	4.82	50	17.15	33.18	3.92	24.10	383.5	0.212
116	11.32	32.99	4.57	75	14.40	33.01	5.36	24.59	337.9	0.302
175p	9.31	33.35	4.43	100	12.10	32.97	4.70	25.02	297.4	0.381
233p	8.37	33.84	2.74	150	10.00	33.12	4.48	25.51	251.4	0.518
				200	8.85	33.59	4.24	26.06	199.6	0.631

BLACK DOUGLAS; October 17, 1950; 0000 GCT; 33°33'N, 127°16.5'W; sounding, 2,415 fm; wind, 280°, force 6; weather, partly cloudy; sea, high; wire angle, 25°. 70.130K-42

OBSERVED Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	INTERPOLATED Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	COMPUTED σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m
0	19.49	33.21	5.21		0	19.49	33.21	5.21		23.55	434.5	0.000
10	19.48	33.22	5.10		10	19.48	33.22	5.10		23.56	434.4	0.043
51	19.17	33.21	5.22		20	19.49	33.22	5.11		23.56	434.7	0.087
75	14.56	33.03	5.93		30	19.49	33.22	5.14		23.56	435.0	0.130
101	12.29	32.99	5.58		50	19.44	33.21	5.22		23.56	435.2	0.217
121	11.01	32.97	5.13		75	14.56	33.03	5.93		24.57	339.7	0.314
143	9.67	33.21	4.92		100	12.40	32.99	5.58		24.97	301.4	0.394
179	9.05	33.57	4.05		150	9.44	33.31	4.87		25.75	228.5	0.527
202	8.69	33.73	3.50		200	8.71	33.71	3.52		26.18	188.6	0.631
254	8.05	33.91	2.76		250	8.11	33.90	2.82		26.42	166.4	0.720
302	7.48	34.00	2.29		300	7.49	34.00	2.30		26.58	150.9	0.799
410	6.32	34.05	1.60		400	6.42	34.05	1.63		26.77	134.0	0.942
511	5.59	34.13	0.81		500	5.65	34.12	0.90		26.92	120.2	1.069
613	5.17	34.27	0.41		600	5.19	34.25	0.42		27.08	105.9	1.182

BLACK DOUGLAS; October 17, 1950; 0300 GCT; 33°33'N, 127°16.5'W; sounding, 2,415 fm; wind, 280°, force 4; weather, partly cloudy; sea, very rough; wire angle, 12°. 70.130K-43

0	19.48	33.22	4.19		0	19.46	33.22	4.18		23.57	433.3	0.000
10	19.49	33.22	5.99		10	19.48	33.22	5.99		23.56	434.1	0.043
51p	19.50	33.23	5.59		20	19.49	33.22	5.98		23.56	434.7	0.087
56	18.92	33.12	5.19		30	19.49	33.22	5.92		23.56	435.0	0.130
61	14.24	33.06	4.93		50	19.50	33.23	5.60		23.56	435.2	0.217
100	13.01	33.08	5.30		75	13.73	33.06	5.03		24.77	320.9	0.312
131	10.97	32.99	5.72		100	13.04	33.08	5.30		24.92	306.8	0.390
177p	9.50	33.30	4.87		150	10.19	33.05	5.55		25.41	259.8	0.532

BLACK DOUGLAS; October 17, 1950; 0600 GCT; 33°33'N, 127°16.5'W; sounding, 2,415 fm; wind, 290°, force 4; weather, partly cloudy; sea, very rough; wire angle, 5°. 70.130K-44

0	19.67	33.24	5.23		0	19.67	33.24	5.23		23.53	437.0	0.000
10	19.68	33.22	5.20		10	19.68	33.22	5.20		23.51	439.0	0.044
51	19.40	33.21	5.39		20	19.69	33.22	5.23		23.51	439.6	0.088
76	14.64	32.94	6.22		30	19.69	33.22	5.29		23.51	439.9	0.132
101	12.61	33.01	5.93		50	19.65	33.21	5.39		23.51	440.3	0.220
126	10.71	32.86	5.57		75	15.50	32.94	6.23		24.28	367.8	0.321
162p	9.22	33.22	4.96		100	12.73	33.01	5.95		24.93	306.1	0.405
231p	8.54	33.84	4.01		150	9.50	32.96	5.16		25.46	255.3	0.545
					200	8.81	33.64	4.39		26.10	195.3	0.658

BLACK DOUGLAS; October 17, 1950; 0900 GCT; 33°33'N, 127°16.5'W; sounding, 2,415 fm; wind, 280°, force 3; weather, clear; sea, very rough; wire angle, 3°. 70.130K-45

0	19.57	33.24	5.41		0	19.57	33.24	5.41		23.56	434.3	0.000
10	19.56	33.24	5.43		10	19.56	33.24	5.43		23.56	434.6	0.043
50	19.54	33.21	5.38		20	19.56	33.24	5.42		23.56	434.9	0.087
75	14.58	32.99	6.30		30	19.55	33.23	5.41		23.55	435.8	0.130
99	12.38	32.95	6.04		50	19.54	33.21	5.38		23.54	437.9	0.218
123	10.92	32.99	5.81		75	14.58	32.99	6.30		24.53	343.2	0.316
153	9.82	33.12	5.38		100	12.34	32.95	6.05		24.96	303.3	0.396
177	9.17	33.30	5.10		150	9.97	33.10	5.43		25.50	252.4	0.535
206	8.94	33.69	4.07		200	8.99	33.62	4.35		26.06	199.5	0.648
259	8.12	33.93	3.91		250	8.30	33.91	3.93		26.39	168.5	0.740
319	7.22	33.95	3.17		300	7.48	33.95	3.46		26.55	154.5	0.821

SIO

CCOFI 5010

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

70.130K-46 BLACK DOUGLAS; October 17, 1950; 1200 GCT; 33°33'N, 127°16.5'W; sounding, 2,415 fm; wind, 280°, force 3; weather, clear; sea, very rough; wire angle, 0°.

0	19.50	33.21	5.54	0	19.50	33.21	5.54	23.55	435.0	0.000
11	19.50	33.17	5.48	10	19.50	33.17	5.48	23.52	438.2	0.044
50	18.84	33.04	5.97	20	19.50	33.14	5.53	23.50	440.7	0.088
75	13.61	32.94	6.35	30	19.51	33.11	5.67	23.47	443.5	0.132
101	11.74	32.86	6.02	50	18.84	33.04	5.97	23.58	433.2	0.220
124	10.41	32.94	5.76	75	13.61	32.94	6.35	24.69	327.8	0.315
154	9.81	33.17	5.37	100	11.78	32.86	6.05	24.99	299.8	0.393
178	9.25	33.31	4.99	150	9.91	33.13	5.44	25.53	249.2	0.530
203	8.92	33.68	4.14	200	8.96	33.63	4.25	26.07	198.3	0.642
251	8.24	33.91	3.83	250	8.27	33.91	3.84	26.40	168.1	0.733
300	7.22	33.91	3.21	300	7.22	33.91	3.21	26.55	154.1	0.814
401	6.04	33.91	1.99	400	6.06	33.91	1.99	26.71	139.7	0.961
500	5.31	33.98	1.00	500	5.31	33.98	1.00	26.85	126.6	1.094
609	4.76	34.13	0.52	600	4.79	34.12	0.55	27.02	110.7	1.212
766	4.34	34.27	0.37	700	4.51	34.22	0.38	27.13	100.9	1.318
1050	3.62	34.34	0.61	800	4.25	34.29	0.38	27.22	93.6	1.415
				1000	3.76	34.33	0.56	27.30	86.6	1.596

70.130K-47 BLACK DOUGLAS; October 17, 1950; 1500 GCT; 33°33'N, 127°16.5'W; sounding, 2,415 fm; wind, 280°, force 2; weather, partly cloudy; sea, rough; wire angle, 0°.

1	19.44	33.17	4.98	0	19.44	33.17	4.98	23.53	436.4	0.000
11	19.43	33.17	4.07	10	19.44	33.17	4.08	23.53	436.8	0.044
50	17.86	32.99	5.18	20	19.43	33.14	4.16	23.51	439.0	0.087
75	14.58	32.99	5.18	30	19.43	33.07	4.63	23.46	444.4	0.132
100	12.91	32.97	5.55	50	17.86	32.99	5.18	23.79	413.3	0.217
124	11.17	32.95	5.25	75	14.58	32.99	5.18	24.54	342.6	0.312
152	9.73	33.03	5.12	100	12.91	32.97	5.55	24.86	312.6	0.394
176	9.16	33.44	4.56	150	9.78	33.02	5.13	25.47	255.3	0.536
205	8.63	33.60	2.85	200	8.69	33.57	2.86	26.07	198.6	0.649
258	8.24	33.87	2.87	250	8.47	33.85	2.86	26.32	175.5	0.742
316	7.12	33.91	2.49	300	7.36	33.90	2.62	26.52	156.5	0.826

70.130K-48 BLACK DOUGLAS; October 17, 1950; 1800 GCT; 33°33'N, 127°16.5'W; sounding, 2,415 fm; wind, 280°, force 2; weather, partly cloudy; sea, rough; wire angle, 9°.

0	19.40	33.12	5.33	0	19.40	33.12	5.33	23.51	439.1	0.000
10	19.40	33.17	5.45	10	19.40	33.17	5.45	23.55	435.5	0.044
49	19.30	33.19	5.37	20	19.39	33.19	5.46	23.56	434.4	0.087
73	14.52	32.97	6.29	30	19.39	33.19	5.43	23.56	434.7	0.131
97	12.97	32.97	6.13	50	19.06	33.18	5.36	23.64	428.1	0.217
122	11.04	32.88	5.77	75	14.47	32.97	6.30	24.54	342.2	0.313
150	10.12	33.08	5.65	100	12.20	32.97	6.11	25.00	299.2	0.393
174	9.45	33.21	5.44	150	10.12	33.08	5.65	25.45	256.5	0.532
204	9.19	33.44	4.38	200	9.22	33.40	4.60	25.85	219.3	0.651
259	8.35	33.89	3.54	250	8.49	33.86	3.57	26.33	175.0	0.749
318	7.58	33.96	3.79	300	7.79	33.96	3.70	26.51	158.2	0.833

70.130K-49 BLACK DOUGLAS; October 17, 1950; 2100 GCT; 33°33'N, 127°16.5'W; sounding, 2,415 fm; wind, 280°, force 2; weather, partly cloudy; sea, moderate; wire angle, 14°.

1	19.64	33.17	4.93	0	19.64	33.17	4.93	23.48	441.3	0.000
11	19.42	33.17	5.04	10	19.42	33.17	5.04	23.54	436.3	0.044
48	19.20	33.21	5.03	20	19.41	33.17	5.03	23.54	436.4	0.088
73	14.44	32.97	5.55	30	19.41	33.18	5.03	23.55	436.0	0.131
97	12.77	33.03	5.44	50	18.50	33.21	5.02	23.80	412.5	0.216
122	10.95	32.88	5.20	75	14.33	32.97	5.55	24.57	339.4	0.310
150	9.68	33.10	5.02	100	12.63	33.03	5.42	24.96	302.7	0.390
175	9.06	33.39	4.53	150	9.68	33.10	5.02	25.55	247.6	0.528
203	8.58	33.69	3.22	200	8.62	33.67	3.36	26.16	190.2	0.637
257	8.05	33.93	2.69	250	8.15	33.92	2.69	26.42	165.6	0.727
316	7.22	33.95	3.11	300	7.39	33.95	2.97	26.56	153.2	0.806

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
BLACK DOUGLAS: October 18, 1950; 0000 GCT; 33°33'N, 127°16.5'W; sounding, 2,415 fm; wind, 280°, force 3; weather, partly cloudy; sea, rough; wire angle, 8°.													70.130K-50
0	19.74	33.19	5.36		0	19.74	33.19	5.36		23.47	442.1	0.000	
10	19.42	33.19	5.30		10	19.42	33.19	5.30		23.55	435.1	0.044	
50	18.74	33.19	5.66		20	19.42	33.19	5.33		23.55	435.2	0.087	
75	14.14	33.17	6.22		30	19.42	33.19	5.40		23.55	435.5	0.131	
99	12.63	33.01	5.97		50	18.74	33.19	5.66		23.73	419.0	0.216	
123	11.06	32.99	5.68		75	14.14	33.17	6.22		24.77	320.8	0.309	
152	9.66	33.13	5.35		100	12.55	33.01	5.96		24.96	302.7	0.387	
184	9.13	33.48	4.86		150	9.70	33.11	5.37		25.55	247.4	0.524	
200	8.64	33.69	3.67		200	8.64	33.69	3.67		26.17	189.0	0.633	
246	8.14	33.87	2.89		250	8.11	33.88	(2.84)		26.40	167.9	0.723	
322p	7.24	33.96	2.89r		300	7.57	33.94	(2.35)		26.53	156.5	0.804	
407p	6.20	34.05	1.39		400	6.29	34.04	(1.47)		26.78	133.1	0.950	
504p	5.36	34.11	0.91		500	5.47	34.11	0.92		26.94	118.6	1.075	
643p	4.74	34.20	0.40		600	4.90	34.16	0.50		27.04	109.0	1.188	
904p	3.96	34.42	0.44		700	4.55	34.26	0.40		27.16	98.4	1.291	
					800	4.25	34.35	0.42		27.27	89.1	1.385	
					1000	(3.79)	(34.47)			(27.41)	(76.6)	(1.551)	
BLACK DOUGLAS; October 18, 1950; 0300 GCT; 33°33'N, 127°16.5'W; sounding, 2,415 fm; wind, 280°, force 2; weather, partly cloudy; sea, moderate; wire angle, 3°.													70.130K-51
0	19.58	33.19	5.33		0	19.58	33.19	5.33		23.52	437.9	0.000	
10	19.52	33.30	5.24		10	19.52	33.30	5.24		23.61	429.3	0.043	
50	19.30	33.19	5.38		20	19.43	33.29	5.25		23.63	428.1	0.086	
75	14.43	32.97	6.29		30	19.39	33.27	5.29		23.62	428.9	0.129	
100	12.63	32.97	6.06		50	19.30	33.19	5.38		23.58	433.2	0.215	
125	10.82	32.97	5.73		75	14.43	32.97	6.29		24.55	341.4	0.312	
152	9.74	33.12	5.41		100	12.61	32.97	6.06		24.92	306.8	0.393	
178	9.22	33.48	4.88		150	9.77	33.10	5.43		25.53	249.2	0.532	
206	8.70	33.71	3.85		200	8.80	33.67	4.10		26.13	192.9	0.642	
259	8.05	33.91	2.77		250	8.17	33.88	2.89		26.39	168.8	0.732	
320	7.30	34.02	2.25		300	7.51	33.99	2.40		26.57	152.0	0.813	
BLACK DOUGLAS; October 18, 1950; 0600 GCT; 33°33'N, 127°16.5'W; sounding, 2,415 fm; wind, 280°, force 1; weather, clear; sea, moderate; wire angle, 0°.													70.130K-52
0	19.53	33.22	3.71		0	19.53	33.22	3.71		23.55	435.0	0.000	
10	19.40	33.21	4.92		10	19.40	33.21	4.92		23.57	432.9	0.043	
50	17.09	33.19	5.10		20	19.40	33.21	5.05		23.57	433.2	0.087	
76	13.91	32.97	5.33		30	19.40	33.20	5.10		23.57	434.3	0.130	
98	12.29	-	4.77		50	17.09	33.19	5.10		24.13	381.0	0.212	
122	10.91	32.99	4.03		75	13.95	32.97	5.33		24.65	331.8	0.301	
151	9.77	33.08	4.44		100	12.15	32.97	4.70		25.01	298.3	0.379	
174	9.25	33.33	4.40		150	9.80	33.08	4.44		25.51	251.2	0.517	
204	8.73	33.69	3.55		200	8.79	33.66	3.76		26.12	193.5	0.628	
258	8.09	33.93	2.20		250	8.16	33.92	2.30		26.42	165.7	0.718	
317	7.44	33.98	1.91		300	7.62	23.97	1.96		26.54	155.0	0.798	
BLACK DOUGLAS; October 18, 1950; 0900 GCT; 33°33'N, 127°16.5'W; sounding, 2,415 fm; wind, 260°, force 1; weather, clear; sea, moderate; wire angle, 0°.													70.130K-53
0	19.49	33.21	5.22		0	19.49	33.21	5.22		23.56	434.0	0.000	
10	19.47	33.17	4.68		10	19.47	33.17	4.68		23.53	437.5	0.044	
50	18.65	33.10	5.35		20	19.47	33.15	4.73		23.51	439.3	0.087	
74	13.80	32.95	5.85		30	19.47	33.13	4.93		23.50	441.1	0.131	
98	12.33	32.94	5.44		50	18.65	33.10	5.35		23.68	424.1	0.218	
123	10.61	32.95	5.06		75	13.70	32.95	5.85		24.69	328.4	0.312	
151	9.61	33.24	4.83		100	12.20	32.94	5.41		24.97	301.5	0.391	
175	9.15	33.42	4.06		150	9.65	33.20	4.82		25.63	239.9	0.526	
205	8.69	33.64	4.05		200	8.72	33.60	4.05		26.09	196.9	0.635	
258	8.18	33.91	3.95		250	8.27	33.90	3.99		26.39	168.8	0.727	
318	7.24	33.91	2.89		300	7.50	33.91	3.20		26.51	157.7	0.808	

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

70.130K-54 BLACK DOUGLAS; October 18, 1950; 1200 GCT; 33°33'N, 127°16.5'W; sounding, 2,415 fm; wind, 260°, force 1; weather, clear; sea, moderate; wire angle, 3°.

0	19.45	33.18	5.24	0	19.45	33.18	5.24	23.54	436.2	0.000
10	19.44	33.21	5.26	10	19.44	33.21	5.26	23.57	433.6	0.044
50	17.66	33.03	5.88	20	19.43	33.19	5.32	23.55	435.4	0.087
76	13.63	32.95	6.42	30	19.44	33.14	5.44	23.51	439.6	0.131
100	12.10	32.95	5.80	50	17.66	33.03	5.88	23.87	405.8	0.215
114p	10.78	32.88u	5.58u	75	13.70	32.95	6.42	24.69	328.4	0.307
124	10.44	32.92	5.63	100	12.10	32.95	5.80	25.00	298.9	0.385
154	9.53	33.22	5.16	150	9.65	33.09	5.25	25.54	248.0	0.522
176	9.07	33.44	4.46	200	8.62	33.66	3.70	26.15	190.9	0.632
201	8.60	33.66	3.70	250	8.15	33.90	3.64	26.41	167.0	0.722
248	8.15	33.89	3.64	300	7.65	33.96	3.37	26.53	156.2	0.802
263p	7.47	33.93	3.39r	400	6.05	33.99	2.00	26.77	133.7	0.947
398p	6.07	33.99	2.01	500	5.22	34.05	1.04	26.92	120.0	1.074
520p	5.13	34.07	0.97	600	4.81	34.14	0.70	27.04	109.4	1.189
775p	4.26	34.31	0.32	700	4.48	34.24	0.47	27.15	99.1	1.292
				800	(4.19)	(34.33)		(27.26)	(89.9)	(1.387)

70.130K-55 BLACK DOUGLAS; October 18, 1950; 1500 GCT; 33°33'N, 127°16.5'W; sounding, 2,415 fm; wind, 280°, force 1; weather, partly cloudy; sea, moderate; wire angle, 7°.

0	19.42	33.15	5.05	0	19.42	33.15	5.05	23.52	437.6	0.000
11	19.42	33.21	5.08	10	19.42	33.21	5.07	23.57	433.4	0.044
50	19.01	33.28	5.55	20	19.42	33.24	5.14	23.59	431.5	0.087
75	14.36	32.99	6.13	30	19.42	33.26	5.25	23.61	430.4	0.130
99	12.92	33.03	5.74	50	19.01	33.28	5.55	23.72	420.1	0.215
123	11.11	32.94	5.26	75	14.36	32.99	6.13	24.58	338.5	0.310
151	9.89	33.06	5.04	100	12.93	33.03	5.72	24.90	308.4	0.391
175	9.36	33.29	4.44	150	9.91	33.05	5.05	25.47	255.2	0.531
204	9.01	33.66	3.01	200	9.07	33.62	3.06	26.05	200.7	0.645
266	8.15	33.91	3.45	250	8.40	33.88	3.34	26.36	172.2	0.738
316	7.30	33.95	3.43	300	7.60	33.94	3.42	26.52	156.9	0.821

70.130K-56 BLACK DOUGLAS; October 18, 1950; 1800 GCT; 33°33'N, 127°16.5'W; sounding, 2,415 fm; wind, 270°, force 1; weather, partly cloudy; sea, moderate; wire angle, 6°.

0	19.58	33.26	5.32	0	19.58	33.26	5.32	23.57	433.1	0.000
10	19.42	33.30	5.26	10	19.42	33.30	5.26	23.64	426.8	0.043
50	19.23	33.17	5.43	20	19.28	33.28	5.27	23.66	425.2	0.086
75	14.36	33.04	6.16	30	19.24	33.25	5.31	23.65	426.7	0.128
100	12.79	33.03	6.03	50	19.23	33.17	5.43	23.59	433.0	0.214
124	10.88	32.97	5.63	75	14.36	33.04	6.16	24.61	335.7	0.310
151	9.57	33.17	5.26	100	12.79	33.03	6.03	24.93	305.5	0.390
176	9.10	33.40	4.96	150	9.60	33.14	5.27	25.59	243.6	0.528
204	8.84	33.71	3.19	200	8.89	33.65	3.42	26.10	195.7	0.637
256	7.96	33.95	2.89	250	8.06	33.95	2.90	26.46	162.0	0.727
315	7.12	33.96	3.07	300	7.30	33.96	3.00	26.58	151.2	0.805

70.130K-57 BLACK DOUGLAS; October 18, 1950; 2100 GCT; 33°33'N, 127°16.5'W; sounding. 2,415 fm; wind, 270°, force 1; weather, partly cloudy; sea, moderate; wire angle, 2°.

0	19.89	33.22	5.38	0	19.89	33.22	5.38	23.46	443.4	0.000
10	19.46	33.37	5.42	10	19.46	33.37	5.41	23.68	422.7	0.043
51	19.27	33.22	5.36	20	19.45	33.35	5.41	23.67	424.3	0.086
76	14.62	33.15	5.32	30	19.45	33.31	5.40	23.64	427.5	0.128
100	12.88	33.08	6.08	50	19.40	33.23	5.35	23.59	432.7	0.214
124	10.79	32.97	5.80	75	14.72	33.15	5.33	24.63	334.1	0.310
154	9.69	33.12	5.42	100	12.88	33.08	6.08	24.95	304.1	0.390
178	9.22	33.40	5.04	150	9.78	33.08	5.48	25.51	250.9	0.529
207	9.02	33.75	4.10	200	9.06	33.68	4.25	26.10	196.1	0.640
259	8.15	33.96	3.86	250	8.33	33.95	3.87	26.42	166.0	0.730
319	7.28	33.98	3.20	300	7.48	33.98	3.47	26.57	152.3	0.810

BLACK DOUGLAS; October 19, 1950; 0000 GCT; 33°33'N, 127°16.5'W; sounding, 2,415 fm; wind, calm; weather, partly cloudy; sea, moderate; wire angle, 0°. 70.130K-58

OBSERVED Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	INTERPOLATED Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	COMPUTED σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m
0	19.67	33.22	5.44		0	19.67	33.22	5.44		23.51	438.4	0.000
11	19.47	33.28	5.12		10	19.50	33.28	5.13		23.60	430.2	0.043
51	17.36	33.04	6.06		20	19.45	33.24	5.27		23.58	432.3	0.087
75	13.63	33.08	6.25		30	19.45	33.17	5.62		23.53	437.7	0.130
100	11.46	32.90	6.02		50	18.00	33.04	6.05		23.79	413.2	0.215
125	10.26	33.01	5.69		75	13.63	33.08	6.25		24.80	317.9	0.307
153	9.51	33.17	5.19		100	11.46	32.90	6.02		25.09	290.5	0.383
178	9.12	33.40	4.59		150	9.60	33.15	5.25		25.60	242.8	0.516
202	9.06	33.71	4.14		200	9.07	33.69	4.18		26.10	195.6	0.625
250	7.89	33.96	3.67		250	7.89	33.96	3.67		26.50	158.6	0.714
299	7.27	33.91	3.41		300	7.25	33.91	3.40		26.55	154.2	0.792
400	6.10	33.96	2.10		400	6.10	33.96	2.10		26.74	136.5	0.938
496	5.29	34.05	1.13		500	5.25	34.06	1.10		26.92	119.6	1.066
602	4.80	34.16	0.62		600	4.83	34.16	0.64		27.05	108.2	1.180
757	4.34	34.31	0.32		700	4.50	34.26	0.40		27.17	97.8	1.283
1041	3.64	34.45	0.64		800	4.22	34.34	0.33		27.26	89.5	1.376
					1000	3.73	34.43	0.59		27.38	78.8	1.545

BLACK DOUGLAS; October 19, 1950; 0300 GCT; 33°33'N, 127°16.5'W; sounding, 2,415 fm; wind, calm; weather, partly cloudy; sea, moderate; wire angle, 0°. 70.130K-59

0	20.07	33.20			0	20.07	33.20			23.40	449.3	0.000
11	19.52	33.24			10	19.53	33.24			23.56	433.9	0.044
50	17.44	33.03			20	19.53	33.21			23.54	436.4	0.088
75	14.28	32.97			30	19.53	33.14			23.49	441.8	0.132
99	12.69	33.03			50	17.44	33.03			23.92	401.2	0.216
123	10.98	32.88			75	14.28	32.97			24.58	338.2	0.308
152	9.65	33.06			100	12.62	33.03			24.96	302.6	0.388
176	9.11	33.38			150	9.72	33.03			25.48	253.6	0.527
204	8.93a)	33.64			200	8.94	33.61			26.06	199.5	0.640
256	7.84	34.09			250	7.98	34.08			26.58	151.2	0.728
316	7.03	33.95			300	7.21	33.99			26.62	147.7	0.803

BLACK DOUGLAS; October 19, 1950; 0600 GCT; 33°33'N, 127°16.5'W; sounding, 2,415 fm; wind, 270°, force 1; weather, cloudy; sea, moderate; wire angle, 2°. 70.130K-60

0	19.97	33.15	5.36		0	19.97	33.15	5.36		23.39	450.4	0.000
10	19.49	33.21	5.42		10	19.49	33.21	5.42		23.55	435.1	0.044
50	16.74	32.97	6.12		20	19.47	33.18	5.54		23.53	437.1	0.088
75	13.81	33.03	6.33		30	19.47	33.10	5.71		23.47	443.2	0.132
99	12.23	32.94	6.12		50	16.74	32.97	6.12		24.04	389.9	0.215
123	10.65	33.04	5.74		75	13.81	33.03	6.33		24.72	325.3	0.305
153	9.57	33.12	5.35		100	12.18	32.94	6.13		24.98	301.1	0.383
176	9.15	33.39	4.92		150	9.65	33.11	5.39		25.56	246.6	0.520
205	8.50	33.69	4.49		200	8.60	33.65	4.55		26.15	191.3	0.629
258	8.00	33.91	4.28		250	8.09	33.88	4.29		26.40	167.6	0.719
317	7.33	34.09	3.58		300	7.52	34.06	3.84		26.63	146.9	0.798

BLACK DOUGLAS; October 19, 1950; 0900 GCT; 33°33'N, 127°16.5'W; sounding, 2,415 fm; wind, 270°, force 1; weather, partly cloudy; sea, moderate; wire angle, 0°. 70.130K-61

0	19.79	33.17	5.37		0	19.79	33.17	5.37		23.45	444.8	0.000
10	19.50	33.21	4.70		10	19.50	33.21	4.70		23.55	435.3	0.044
50	19.37	33.18	4.93		20	19.50	33.21	4.72		23.55	435.7	0.088
75	14.32	32.97	5.54		30	19.50	33.20	4.78		23.54	436.7	0.131
99	12.85	33.12	5.50		50	19.37	33.18	4.93		23.54	437.6	0.219
124	11.63	33.10	5.19		75	14.32	32.97	5.54		24.57	339.8	0.316
152	9.72	33.21	5.17		100	12.75	33.12	5.50		25.01	298.4	0.396
176	-	33.33	4.57		150	9.80	33.20	5.14		25.60	242.3	0.531
205	8.67	33.58	4.36		200	8.75	33.53	4.39		26.03	202.5	0.642
258	7.98	33.95	3.55		250	8.08	33.94	3.70		26.45	163.0	0.733
316	7.31	33.93	3.28		300	7.51	33.94	3.32		26.53	155.7	0.813

a) Alternate value, 9.06°C, not used in interpolation.

SIO

CCOFI 5010

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
70.130K-62	BLACK DOUGLAS; October 19, 1950; 1200 GCT; 33°33'N, 127°16.5'W; sounding, 2,415 fm; wind, 270°, force 1; weather, partly cloudy; sea, moderate; wire angle, 7°.											
0	19.72	33.17	5.16		0	19.72	33.17	5.16		23.46	443.8	0.000
10	19.49	33.60r	5.18		10	19.49	(33.20)	5.18		(23.55)	(435.1)	(0.044)
50	19.38	33.20	5.23		20	19.46	(33.21)	5.18		(23.57)	(434.7)	(0.087)
75	14.47	33.43r	6.01		30	19.44	(33.21)	5.19		(23.56)	(434.5)	(0.131)
99	12.75	32.98	6.01		50	19.38	33.20	5.23		23.57	434.4	(0.218)
122	11.02	32.91	5.81		75	14.47	33.11	6.01		24.66	330.6	(0.313)
151	9.75	33.04	5.49		100	12.59	32.97	6.00		24.92	306.4	(0.393)
176	9.26	33.30	4.83		150	9.76	33.04	5.49		25.48	253.5	(0.533)
198	8.83	33.58	4.47		200	8.82	33.60	4.44		26.07	198.4	(0.646)
244	7.94	33.85	3.77		250	7.85	33.87	3.73		26.43	164.9	(0.736)
294	7.32	33.91	3.68		300	7.24	33.91	3.65		26.55	154.1	(0.817)
393	6.14	33.95	2.17		400	6.07	33.96	2.05		26.74	136.2	(0.962)
488	5.40	34.02	1.24		500	5.34	34.03	1.15		26.89	123.0	(1.091)
593	4.87	34.13	0.61		600	4.84	34.13	0.59		27.03	110.6	(1.207)
747	4.33	34.28	0.46		700	4.49	34.23	0.48		27.14	99.9	(1.313)
1032	3.70	34.70	0.58		800	4.21	34.35	0.47		27.27	88.7	(1.407)
					1000	3.78	34.65	0.58		27.55	63.1	(1.559)
70.130K-63	BLACK DOUGLAS; October 19, 1950; 1500 GCT; 33°33'N, 127°16.5'W; sounding, 2,415 fm; wind, 270°, force 1; weather, cloudy; sea, moderate; wire angle, 3°.											
0	19.53	33.22	5.33		0	19.53	33.22	5.33		23.54	436.0	0.000
10	19.46	33.19	5.35		10	19.46	33.19	5.35		23.54	435.8	0.044
50	16.71	32.98	6.14		20	19.45	33.13	5.62		23.50	440.2	0.087
75	13.78	32.98	6.14		30	19.44	33.06	5.90		23.45	445.4	0.132
99	12.01	32.90	6.03		50	16.71	32.98	6.14		24.05	388.9	0.215
122	10.66	-	5.72		75	13.78	32.98	6.14		24.70	327.2	0.305
151	9.60	33.15	5.27		100	11.70	32.90	6.03		25.04	295.4	0.382
175	9.22	33.37	4.75		150	9.66	33.15	5.28		25.59	243.8	0.517
204	8.57	33.71	3.56		200	8.63	33.66	3.59		26.15	191.1	0.626
258	7.98	33.98	3.66		250	8.08	33.97	3.64		26.47	160.8	0.714
317	7.22	33.96	3.18		300	7.44	33.96	3.37		26.56	153.2	0.792
70.130K-64	BLACK DOUGLAS; October 19, 1950; 1800 GCT; 33°33'N, 127°16.5'W; sounding, 2,415 fm; wind, 270°, force 1; weather, cloudy; sea, moderate; wire angle, 3°.											
0	19.62	33.22	4.91		0	19.62	33.22	4.91		23.52	437.7	0.000
10	19.47	33.24	4.84		10	19.47	33.24	4.84		23.58	432.4	0.044
50	18.65	33.12	5.20		20	19.45	33.22	4.88		23.57	433.7	0.087
74	15.27	32.99	5.77		30	19.45	33.19	4.96		23.55	436.2	0.130
98	13.23	33.04	6.00		50	18.65	33.12	5.20		23.69	422.9	0.216
123	11.31	32.95	5.76		75	15.16	32.99	5.77		24.41	354.9	0.313
152	9.78	33.08	5.15		100	13.19	33.04	6.00		24.86	312.6	0.397
175	9.36	33.37	4.96		150	9.81	33.06	5.19		25.49	252.8	0.538
204	8.86	33.60	4.62		200	8.93	33.57	4.69		26.03	202.3	0.652
256	8.09	33.87	4.12		250	8.18	33.85	4.17		26.37	171.2	0.745
315	7.32	33.95	3.17		300	7.52	33.94	3.44		26.53	155.8	0.827

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	µg at/L	m	°C	‰	ml/L	µg at/L	g/L	$10^5 cm^3/g$	dyn. m	

E. W. SCRIPPS; October 12, 1950; 0000 GCT; 35°35.5'N, 122°07.5'W; sounding, 1,080 fm; wind, 200°, force 1; weather, fog; sea, very rough; wire angle, 0°. 72.60K-2a)

0	16.2	33.28	6.27	0	16.2	33.28	6.27	24.40	353.7	0.000
10	15.03	33.24	6.45	10	15.03	33.24	6.45	24.63	332.1	0.034
25	14.06	33.24	5.66	20	14.33	33.24	5.89	24.78	318.2	0.067
50	11.45	33.10	5.25	30	13.88	33.22	5.55	24.86	311.0	0.098
80	9.76	33.37	4.36	50	11.45	33.10	5.25	25.24	275.2	0.157
99	9.11	33.71	3.34	75	9.97	33.32	4.54	25.67	234.7	0.221
124	8.70	33.80	2.94	100	9.12	33.72	3.30	26.12	192.2	0.274
153	8.20	33.86	2.99	150	8.27	33.85	2.97	26.35	170.8	0.365
178	7.82	33.93	3.00	200	7.57	33.98	2.31	26.56	151.9	0.445
202	7.54	33.98	2.29	250	7.03	34.02	2.04	26.66	142.3	0.519
251	7.02	34.02	2.02	300	7.01	34.13	1.38	26.75	134.6	0.588
301	7.02	34.13	1.37	400	6.09	34.13	0.44	26.88	123.8	0.717
403	6.06	34.13	0.45	500	5.68	34.22	0.33	27.00	113.1	0.836
610	5.34	34.33	0.32	600	5.38	34.33	0.32	27.12	102.4	0.943
768	4.58	34.34	0.61	700	4.91	34.33	0.44	27.18	97.6	1.043
1052	3.60	34.43	-	800	4.43	34.35		27.25	91.3	1.138
				1000	3.74	34.42		27.37	79.7	1.310

E. W. SCRIPPS; October 12, 1950; 0300 GCT; 35°35.5'N, 122°07.5'W; sounding, 1,080 fm; wind, 240°, force 1; weather, fog; sea, rough; wire angle, 0°. 72.60K-3

0	15.4	33.30	5.87	0	15.4	33.30	5.87	24.60	335.2	0.000
10	14.57	33.28	5.83	10	14.57	33.28	5.83	24.76	319.4	0.033
25	14.16	33.24	5.80	20	14.29	33.26	5.81	24.80	315.9	0.065
50	10.28	33.06	5.38	30	13.97	33.20	5.76	24.82	314.2	0.096
75	9.62	33.53	3.94	50	10.28	33.06	5.38	25.41	258.4	0.153
99	9.25	33.69	3.52	75	9.62	33.53	3.94	25.89	213.6	0.212
124	8.72	33.80	3.05	100	9.25	33.70	3.51	26.08	195.7	0.263
153	8.38	33.91	2.69	150	8.42	33.90	2.69	26.37	169.3	0.355
177	7.94	33.93	2.73	200	7.61	33.98	2.46	26.55	152.5	0.435
206	7.54	34.00	2.36	250	7.18	34.03	1.93	26.65	143.6	0.509
260	7.14	34.04	1.83	300	7.08	34.10	1.42	26.72	137.8	0.579
319	7.00	34.14	1.22							

E. W. SCRIPPS; October 12, 1950; 0600 GCT; 35°35.5'N, 122°07.5'W; sounding, 1,080 fm; wind, 220°, force 1; weather, fog; sea, very rough; wire angle, 0°. 72.60K-4

0	15.1	33.27	5.84	0	15.1	33.27	5.84	24.64	331.1	0.000
10	14.17	33.19	5.90	10	14.17	33.19	5.90	24.78	317.8	0.032
25	11.76	33.03	5.65	20	12.75	33.06	5.75	24.96	300.9	0.063
50	9.65	33.51	4.66	30	10.80	33.04	5.47	25.31	268.1	0.092
75	9.48	33.48	3.89	50	9.65	33.51	4.66	25.87	214.9	0.140
99	9.02	33.66	3.40	75	9.48	33.48	3.89	25.87	215.3	0.194
124	8.64	33.78	2.82	100	9.00	33.67	3.39	26.10	194.1	0.245
153	8.32	33.93	2.44	150	8.35	33.92	2.45	26.39	166.8	0.335
178	8.05	33.96	-	200	7.68	33.98	2.73	26.54	153.5	0.416
206	7.60	33.98	2.75	250	7.38	34.03	1.89	26.62	146.4	0.490
260	7.30	34.04	1.72	300	6.89	34.10	1.48	26.75	135.2	0.560
319	6.68	34.13	1.40							

a) Station 72.60K-2 is the first station of this anchor series. It was taken at the same time as 70.90K-2 of the Crest and 70.130K-2 of the Black Douglas.

SIO

CCOFI 5010

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

72.60K-5 E. W. SCRIPPS; October 12, 1950; 0900 GCT; 35°35.5'N, 122°07.5'W; sounding, 1,080 fm; wind, 320°, force 2; weather, fog; sea, very rough; wire angle, 0°.

0	15.9	33.28	5.94	0	15.9	33.28	5.94	24.47	347.2	0.000
10	14.96	33.24	6.06	10	14.96	33.24	6.06	24.65	330.7	0.034
25	12.64	33.12	5.62	20	13.68	33.14	5.87	24.84	312.7	0.066
50	9.94	33.13	5.29	30	10.83	33.12	5.51	25.36	262.7	0.095
75	9.46	33.51	3.90	50	9.94	33.13	5.29	25.53	247.6	0.146
99	9.15	33.64	3.43	75	9.46	33.51	3.90	25.90	212.6	0.203
124	8.72	33.78	3.08	100	9.14	33.65	3.41	26.06	197.7	0.255
154	8.43	33.84	2.90	150	8.49	33.84	2.92	26.31	174.7	0.348
179	7.90	33.91	2.83	200	7.63	33.95	2.68	26.52	155.0	0.431
208	7.56	33.96	2.58	250	7.19	34.02	2.13	26.64	144.5	0.505
263	7.06	34.03	2.00	300	6.71	34.05	1.57	26.73	136.5	0.575
323	6.54	34.05	1.28							

72.60K-6 E. W. SCRIPPS; October 12, 1950; 1200 GCT; 35°35.5'N, 122°07.5'W; sounding, 1,080 fm; wind, 320°, force 2; weather, fog; sea, very rough; wire angle, 0°.

0	16.0	33.28	5.69	0	16.0	33.28	5.69	24.45	349.4	0.000
10	15.26	33.26	5.68	10	15.26	33.26	5.68	24.60	335.3	0.034
25	14.16	33.13	5.72	20	14.45	33.18	5.71	24.71	325.0	0.067
50	11.92	33.10	5.18	30	13.90	33.12	5.71	24.78	318.7	0.099
74	9.93	33.26	4.45	50	11.92	33.10	5.18	25.15	283.7	0.160
99	9.34	33.62	3.86	75	9.91	33.27	4.41	25.64	237.4	0.225
123	8.66	33.80	-	100	9.31	33.63	3.81	26.02	201.8	0.280
152	8.13	33.93	2.65	150	8.17	33.92	2.67	26.42	164.1	0.371
176	7.74	33.95	2.71	200	7.51	33.96	2.12	26.55	152.6	0.450
201	7.50	33.96	2.12	250	7.09	34.05	2.12	26.68	140.9	0.524
249	7.10	34.05	2.12	300	6.59	34.09	1.36	26.78	131.9	0.592
298	6.60	34.09	1.37	400	5.97	34.18	1.34	26.93	118.5	0.717
400	5.97	34.18	1.34	500	5.59	34.26	0.88	27.04	109.0	0.831
606	5.30	34.31	0.32	600	5.32	34.31	0.34	27.11	103.1	0.937
763	4.74	34.38	0.29	700	5.00	34.36	0.28	27.19	96.5	1.036
1051	3.61	34.49	0.66	800	4.59	34.40	0.30	27.27	89.5	1.129
				1000	3.77	34.48	0.57	27.42	75.6	1.295

72.60K-7 E. W. SCRIPPS; October 12, 1950; 1500 GCT; 35°35.5'N, 122°07.5'W; sounding, 1,080 fm; wind, 320°, force, 3; weather, fog; sea, very rough; wire angle, 1°.

0	14.9	33.28	5.74	0	14.9	33.28	5.74	24.69	326.3	0.000
10	14.89	33.27	5.59	10	14.89	33.27	5.59	24.68	327.1	0.033
25	14.48	33.21	5.60	20	14.80	33.23	5.59	24.67	328.4	0.065
50	10.12	33.53	4.33	30	13.93	33.22	5.52	24.85	312.0	0.097
75	9.74	33.60	3.73	50	10.12	33.53	4.33	25.81	221.1	0.151
99	9.05	33.77	3.06	75	9.74	33.60	3.73	25.92	211.1	0.205
124	8.58	33.91	2.63	100	9.02	33.78	3.04	26.18	186.3	0.254
153	8.28	33.91	2.36	150	8.30	33.91	2.37	26.39	166.8	0.343
177	7.94	33.87	2.49	200	7.62	33.92	2.44	26.50	157.1	0.424
206	7.54	33.93	2.42	250	7.30	34.01	1.83	26.62	146.7	0.500
260	7.24	34.02	1.66	300	6.82	34.04	1.42	26.71	138.7	0.571
319	6.60	34.04	1.37							

E. W. SCRIPPS; October 12, 1950; 1800 GCT; 35°35.5'N, 122°07.5'W; sounding, 1,080 fm; wind, 320°, force, 4; weather, fog; sea, high; wire angle, 0°. 72.60K-8

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
0	15.0	33.29	5.84		0	15.0	33.29	5.84		24.68	327.6	0.000
10	14.88	33.28	5.88		10	14.88	33.28	5.88		24.69	326.1	0.033
25	12.40	33.22	5.48		20	13.75	33.24	5.67		24.90	306.7	0.064
50	9.88	33.15	5.01		30	11.40	33.20	5.33		25.32	266.5	0.093
74	9.74	33.55	3.87		50	9.88	33.15	5.01		25.55	245.3	0.144
99	9.05	33.69	3.22		75	9.73	33.56	3.83		25.89	213.1	0.201
123	8.62	33.84	2.80		100	9.03	33.70	3.20		26.12	192.3	0.252
153	8.24	33.95	2.39		150	8.27	33.94	2.41		26.42	164.1	0.341
177	8.12	33.98	2.52		200	7.60	33.98	2.60		26.55	152.4	0.421
206	7.50	33.98	2.60		250	7.31	34.07	1.86		26.66	142.4	0.494
261	7.28	34.09	1.62		300	6.81	34.06	1.33		26.73	137.1	0.563
320	6.54	34.05	1.26									

E. W. SCRIPPS; October 12, 1950; 2100 GCT; 35°35.5'N, 122°07.5'W; sounding, 1,080 fm; wind, 320°, force 4; weather, fog; sea, high; wire angle, 0°. 72.60K-9

0	15.8	33.28	5.84		0	15.8	33.28	5.84		24.49	345.1	0.000
10	15.50	33.30	5.68		10	15.50	33.30	5.68		24.57	337.6	0.034
25	13.32	33.19	5.63		20	13.94	33.24	5.64		24.86	310.4	0.067
50	9.94	33.24	4.94		30	11.90	33.19	5.60		25.22	276.0	0.096
74	9.87	33.51	4.02		50	9.94	33.24	4.94		25.61	239.6	0.147
98	9.18	33.73	3.31		75	9.84	33.52	4.02		25.84	217.8	0.205
122	8.73	33.80	2.93		100	9.12	33.74	3.29		26.13	190.8	0.256
151	8.43	33.91	2.54		150	8.46	33.91	2.55		26.37	169.1	0.346
175	8.12	33.95	2.49		200	7.57	34.01	2.54		26.58	149.7	0.426
203	7.52	34.02	2.55		250	7.33	34.08	1.65		26.67	142.0	0.498
255	7.30	34.09	1.56		300	6.75	34.09	1.34		26.76	134.1	0.567
313	6.58	34.09	1.32									

E. W. SCRIPPS; October 13, 1950; 0000 GCT; 35°35.5'N, 122°07.5'W; sounding, 1,080 fm; wind, 320°, force 4; weather, cloudy; sea, high; wire angle, 0°. 72.60K-10

0	15.4	33.26	5.80		0	15.4	33.26	5.80		24.56	338.1	0.000
10	15.15	33.26	5.90		10	15.15	33.26	5.90		24.62	333.2	0.034
25	14.30	33.21	5.87		20	14.50	33.22	5.88		24.73	323.1	0.066
50	12.25	33.21	5.45		30	14.12	33.21	5.79		24.80	316.5	0.098
74	10.10	33.13	5.00		50	12.25	33.21	5.45		25.17	281.3	0.158
99	9.58	33.60	-		75	10.09	33.13	4.97		25.50	250.7	0.225
123	8.78	33.75	3.09		100	9.55	33.61	4.18		25.96	207.1	0.282
151	8.31	33.93	2.35		150	8.32	33.92	2.36		26.40	166.3	0.375
175	8.07	33.96	2.57		200	7.49	33.98	2.62		26.57	150.8	0.454
199	7.50	33.98	2.62		250	7.31	34.07	1.54		26.66	142.4	0.528
247	7.34	34.07	1.62		300	6.78	34.07	0.63		26.74	135.9	0.597
295	6.82	34.07	0.67		400	6.09	34.16	0.54		26.90	121.6	0.726
397	6.10	34.16	0.54		500	5.76	34.25	0.47		27.01	111.9	0.843
602	5.38	34.31	0.43		600	5.39	34.31	0.43		27.10	104.0	0.951
760	4.58	34.38	0.39		700	4.89	34.36	0.40		27.20	95.2	1.050
1050	3.63	34.45	1.58		800	4.40	34.39	0.44		27.28	88.0	1.142
					1000	3.79	34.43	1.26		27.38	79.5	1.310

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

72.60K-11 E. W. SCRIPPS; October 13, 1950; 0300 GCT; 35°35.5'N, 122°07.5'W; sounding, 1,080 fm; wind, 320°, force 5; weather, partly cloudy; sea, high; wire angle, 0°.

0	15.2	33.30	5.75	0	15.2	33.30	5.75	24.64	331.0	0.000
10	14.91	33.22	5.48	10	14.91	33.22	5.48	24.64	331.6	0.033
25	14.04	33.24	5.74	20	14.39	33.23	5.65	24.76	320.1	0.066
50	10.56	33.03	4.89	30	13.60	33.23	5.70	24.92	304.8	0.097
74	9.98	33.65	3.76	50	10.56	33.03	4.89	25.34	265.2	0.154
99	9.13	33.78	3.38	75	9.97	33.66	3.75	25.93	209.6	0.213
124	8.58	33.91	2.96	100	9.12	33.78	3.34	26.17	187.8	0.263
153	8.33	33.91	2.35	150	8.37	33.91	2.37	26.38	167.8	0.352
177	8.07	33.96	2.34	200	7.70	33.97	2.37	26.53	154.5	0.432
206	7.62	33.97	2.39	250	7.41	34.05	1.86	26.63	145.3	0.507
260	7.34	34.05	1.68	300	6.90	34.05	1.37	26.71	139.1	0.578
320	6.64	34.05	1.28							

72.60K-12 E. W. SCRIPPS; October 13, 1950; 0600 GCT; 35°35.5'N, 122°07.5'W; sounding, 1,080 fm; wind, 320°, force 5; weather; partly cloudy; sea, very rough; wire angle, 0°.

0	15.0	33.22	5.84	0	15.0	33.22	5.84	24.62	332.7	0.000
10	14.66	33.22	5.38	10	14.66	33.22	5.38	24.70	325.7	0.033
25	13.58	33.19	-	20	13.80	33.20	5.10	24.86	310.6	0.065
50	10.06	33.23	4.51	30	11.65	33.19	4.89	25.27	271.6	0.094
75	9.48	33.62	3.62	50	10.06	33.23	4.51	25.58	242.1	0.145
99	8.91	33.73	3.08	75	9.48	33.62	3.62	25.98	204.9	0.201
124	8.58	33.84	2.81	100	8.90	33.73	3.06	26.16	188.1	0.250
153	8.30	33.91	2.31	150	8.34	33.90	2.33	26.38	168.1	0.339
177	7.82	33.96	2.86	200	7.53	34.03	2.62	26.60	147.7	0.419
207	7.48	34.04	2.51	250	7.20	34.04	1.77	26.66	143.1	0.491
260	7.13	34.04	1.60	300	6.71	34.07	1.07	26.75	135.0	0.560
319	6.50	34.09	0.85							

72.60K-13 E. W. SCRIPPS; October 13, 1950; 0900 GCT; 35°35.5'N, 122°07.5'W; sounding, 1,080 fm; wind, 320°, force 5; weather, partly cloudy; sea, high; wire angle, 0°.

0	15.4	33.30	4.94	0	15.4	33.30	4.94	24.60	335.2	0.000
10	15.15	33.24	5.22	10	15.15	33.24	5.22	24.60	334.6	0.033
25	14.22	33.20	4.49	20	14.53	33.22	4.87	24.72	323.7	0.066
50	10.16	33.06	3.93	30	13.91	33.18	4.25	24.82	314.5	0.098
75	10.12	33.42	3.96	50	10.16	33.06	3.93	25.43	256.5	0.155
99	9.17	33.64	2.91	75	10.12	33.42	3.96	25.72	229.6	0.216
124	8.66	33.70u	2.79r	100	9.15	33.65	2.89	26.06	197.9	0.270
129p	8.62	33.73	2.36	150	8.30	33.81	2.42	26.32	174.2	0.363
176p	7.71	33.89	2.63							

72.60K-14 E. W. SCRIPPS; October 13, 1950; 1200 GCT; 35°35.5'N, 122°07.5'W; sounding, 1,080 fm; wind, 320°, force 5; weather, partly cloudy; sea, high; wire angle, 0°.

0	15.8	33.22	5.18	0	15.8	33.22	5.18	24.45	349.5	0.000
10	15.53	33.24	5.66	10	15.53	33.24	5.66	24.52	342.6	0.035
25	13.98	33.21	5.87	20	15.40	33.22	5.85	24.53	341.6	0.069
50	12.25	33.17	5.38	30	13.82	33.20	5.81	24.86	311.2	0.102
74	10.40	33.42	4.38	50	12.25	33.17	5.38	25.14	284.3	0.161
98	9.11	33.68	3.40	75	10.33	33.43	4.36	25.69	232.4	0.226
123	8.61	33.71	2.44	100	9.05	33.69	3.33	26.11	193.4	0.279
151	8.39	33.87	2.44	150	8.40	33.86	2.43	26.34	171.9	0.370
175	8.14	33.95	2.19	200	7.66	33.95	2.89	26.52	155.6	0.452
200	7.66	33.95	2.89	250	7.35	34.04	1.88	26.64	145.2	0.527
249	7.37	34.04	1.90	300	6.77	34.07	1.28	26.74	135.8	0.597
298	6.78	34.07	1.29	400	6.07	34.13	0.73	26.88	123.5	0.727
402	6.07	34.13	0.72	500	5.60	34.17	0.51	26.97	115.8	0.847
609	5.18	34.23	0.40	600	5.20	34.22	0.40	27.06	108.3	0.959
768	4.62	34.34	0.32	700	4.86	34.29	0.32	27.15	100.0	1.063
1058	3.60	34.42	0.60	800	4.51	34.36	0.33	27.25	91.5	1.158
				1000	3.82	34.41	0.51	27.36	81.4	1.331

E. W. SCRIPPS; October 13, 1950; 1500 GCT; 35°35.5'N, 122°07.5'W; sounding, 1,080 fm; wind 320°, force 5; weather, cloudy; sea, high; wire angle, 0°. 72.60K-15

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
0	15.8	33.23	5.74		0	15.8	33.23	5.74		24.45	348.8	0.000
10	15.54	33.23	6.13		10	15.54	33.23	6.13		24.51	343.7	0.035
25	14.70	33.22	5.82		20	15.48	33.22	6.00		24.52	343.3	0.069
50	12.40	33.18	5.47		30	13.87	33.21	5.72		24.85	311.5	0.102
75	10.06	33.44	4.29		50	12.40	33.18	5.47		25.12	286.3	0.161
99	9.30	33.64	3.29		75	10.06	33.44	4.29		25.74	227.4	0.226
123	8.54	33.77	2.94		100	9.29	33.64	3.26		26.03	200.8	0.279
153	8.32	33.89	2.36		150	8.36	33.88	2.38		26.36	169.9	0.372
178	8.02	33.92	2.52		200	7.58	33.95	2.61		26.53	154.3	0.453
207	7.50	33.96	2.60		250	7.36	34.06	1.83		26.65	143.9	0.528
261	7.29	34.07	1.68		300	6.83	34.07	1.39		26.73	136.6	0.597
320	6.52	34.07	1.31									

E. W. SCRIPPS; October 13, 1950; 1800 GCT; 35°35.5'N, 122°07.5'W; sounding, 1,080 fm; wind, 320°, force 5; weather, cloudy; sea, high; wire angle, 0°. 72.60K-16

0	15.8	33.22	5.31		0	15.8	33.22	5.31		24.45	349.5	0.000
10	15.56	33.21	5.47		10	15.56	33.21	5.47		24.49	245.6	0.035
25	13.80	33.17	5.55		20	13.89	33.18	5.55		24.83	313.8	0.068
50	10.91	33.35	4.79		30	13.74	33.19	5.44		24.86	310.4	0.099
75	9.69	33.58	3.91		50	10.91	33.35	4.79		25.53	247.5	0.155
99	8.96	33.66	3.29		75	9.69	33.58	3.91		25.92	211.0	0.212
123	8.48	33.78	2.96		100	8.93	33.67	3.27		26.11	193.0	0.263
153	8.25	33.90	2.25		150	8.28	33.89	2.27		26.38	167.9	0.353
177	7.92	33.95	2.49		200	7.54	33.98	2.48		26.56	151.5	0.432
206	7.46	33.98	2.49		250	7.33	34.08	1.83		26.67	142.0	0.506
260	7.30	34.08	1.63		300	6.97	34.05	1.42		26.70	140.0	0.576
320	6.70	34.05	1.40									

E. W. SCRIPPS; October 13, 1950; 2100 GCT; 35°.35.5'N, 122°07.5'W; sounding, 1,080 fm; wind, 310°, force 4; weather, overcast; sea, very rough; wire angle, 0°. 72.60K-17

0	15.8	33.26	5.33		0	15.8	33.26	5.33		24.48	346.6	0.000
10	15.55	33.21	4.70		10	15.55	33.21	4.70		24.49	345.4	0.035
25	14.40	33.22	5.03		20	14.70	33.21	4.99		24.68	327.8	0.068
50	10.55	33.40	4.32		30	13.93	33.24	4.97		24.86	310.5	0.100
75	9.68	33.57	2.51r		50	10.55	33.40	4.32		25.63	237.8	0.155
99	9.03	33.68	3.18		75	9.68	33.57	3.70		25.91	211.7	0.211
124	8.58	33.75	2.64		100	9.02	33.68	3.16		26.10	193.7	0.262
153	8.27	33.96	2.14		150	8.30	33.96	2.17		26.43	163.1	0.351
177	8.04	33.96	2.12		200	7.62	33.95	2.19		26.53	154.9	0.431
206	7.54	33.95	2.19		250	7.37	34.06	1.63		26.65	144.0	0.505
259	7.32	34.07	1.54		300	6.90	34.05	1.40		26.71	139.1	0.576
317	6.64	34.04	1.37									

E. W. SCRIPPS; October 14, 1950; 0000 GCT; 35°35.5'N, 122°07.5'W; sounding, 1,080 fm; wind, 310°, force 3; weather, haze; sea, high; wire angle, 0°. 72.60K-18

0	15.3	33.24	5.41		0	15.3	33.24	5.41		24.57	337.5	0.000
10	15.10	33.21	5.03		10	15.10	33.21	5.03		24.59	336.2	0.034
25	14.13	33.21	5.03		20	14.27	33.21	5.02		24.77	319.2	0.066
50	13.99	33.20	4.39		30	14.08	33.21	4.97		24.81	315.7	0.098
75	10.56	33.40	3.93		50	13.99	33.20	4.39		24.82	315.1	0.161
99	9.73	33.53	3.55		75	10.56	33.40	3.93		25.63	238.3	0.230
123	8.98	33.68	3.17		100	9.72	33.53	3.52		25.87	215.7	0.287
152	8.54	33.84	2.34		150	8.57	33.83	2.40		26.29	176.7	0.385
177	8.33	33.93	1.77		200	7.93	34.04	1.98		26.55	152.6	0.467
201	7.92	34.04	1.99		250	7.35	34.07	1.25		26.66	143.0	0.542
250	7.35	34.07	1.25		300	6.74	34.09	1.35		26.76	133.9	0.611
298	6.78	34.09	1.37		400	6.05	34.13	0.71		26.88	123.3	0.739
401	6.05	34.13	0.70		500	5.58	34.21	0.71		27.00	112.6	0.857
608	5.14	34.29	0.76		600	5.17	34.28	0.77		27.11	103.4	0.965
766	4.56	34.36	0.35		700	4.80	34.33	0.52		27.19	96.4	1.065
1051	3.67	34.47	0.62		800	4.45	34.37	0.33		27.26	90.1	1.158
					1000	3.82	34.45	0.53		27.39	78.4	1.327

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	OBSERVED					INTERPOLATED					COMPUTED		
	Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m
72.60K-19	E. W. SCRIPPS; October 14, 1950; 0300 GCT; 35°35.5'N, 122°07.5'W; sounding, 1,080 fm; wind, 340°, force 4; weather, clear; sea, high; wire angle, 0°.												
	0	15.8	33.19	5.35		0	15.8	33.19	5.35		24.42	351.7	0.000
	10	15.21	33.19	4.68		10	15.21	33.19	4.68		24.54	340.4	0.035
	25	14.08	33.19	5.09		20	14.45	33.19	4.98		24.72	324.2	0.068
	50	11.37	33.33	4.02		30	13.62	33.20	5.03		24.90	307.3	0.099
	75	10.26	33.44	2.87		50	11.37	33.33	4.02		25.43	256.9	0.156
	90p	9.80	33.62r	2.99		75	10.26	33.44	2.87		25.71	230.7	0.217
	99	9.39	33.62	3.02		100	9.35	33.63	3.02		26.01	202.5	0.271
	123	8.39	33.80	2.12		150	8.06	33.89	1.84		26.41	164.8	0.363
	134p	8.53r	33.80r	1.86		200	7.80	33.98	1.78		26.52	155.2	0.442
	180p	7.90	33.95	1.83		250	7.44	34.02	1.44		26.61	148.0	0.519
	263p	7.32	34.03	1.39		300	(6.98)	(34.05)			(26.69)	(140.1)	(0.590)
72.60K-20	E. W. SCRIPPS; October 14, 1950; 0600 GCT; 35°35.5'N, 122°07.5'W; sounding, 1,080 fm; wind, 320°, force 5; weather, partly cloudy; sea, high; wire angle, 0°.												
	0	15.1	33.26	6.04		0	15.1	33.26	6.04		24.63	332.1	0.000
	10	15.16	33.22	5.69		10	15.16	33.22	5.69		24.59	336.3	0.033
	25	13.69	33.19	5.65		20	14.05	33.19	5.66		24.80	316.3	0.066
	50	11.15	33.33	4.91		30	13.36	33.19	5.57		24.94	303.1	0.097
	75	9.69	33.57	3.82		50	11.15	33.33	4.91		25.47	253.0	0.153
	99	8.81	33.67	3.26		75	9.69	33.57	3.82		25.91	211.9	0.211
	123	8.44	33.80	2.88		100	8.80	33.67	3.24		26.13	191.1	0.261
	152	8.28	33.93	2.65		150	8.28	33.92	2.66		26.41	165.7	0.350
	177	8.09	33.96	2.34		200	7.52	33.97	2.17		26.56	152.0	0.430
	206	7.42	33.97	2.15		250	7.11	33.99	2.07		26.63	145.6	0.504
	259	7.07	34.00	1.99		300	6.81	34.02	1.52		26.69	140.1	0.575
	320	6.59	34.03	1.22									
72.60K-21	E. W. SCRIPPS; October 14, 1950; 0900 GCT; 35°35.5'N, 122°07.5'W; sounding, 1,080 fm; wind, 320°, force 6; weather, partly cloudy; sea, high; wire angle, 0°.												
	0	15.0	33.19	5.59		0	15.0	33.19	5.59		24.60	334.9	0.000
	10	14.40	33.19	5.73		10	14.40	33.19	5.73		24.73	323.0	0.033
	25	14.01	33.19	5.56		20	14.25	33.19	5.65		24.76	320.2	0.065
	50	10.86	33.42	4.65		30	13.52	33.21	5.41		24.92	304.7	0.096
	74	9.64	33.59	3.86		50	10.86	33.42	4.65		25.59	241.5	0.151
	99	9.05	33.69	3.40		75	9.61	33.59	3.84		25.94	209.0	0.207
	123	8.52	33.86	2.97		100	9.02	33.70	3.38		26.12	192.2	0.257
	152	8.32	33.91	2.55		150	8.32	33.91	2.57		26.39	167.1	0.347
	176	8.21	33.95	2.32		200	7.99	33.98	2.10		26.50	157.9	0.429
	205	7.92	33.98	2.06		250	7.18	34.02	1.97		26.64	144.3	0.504
	257.	7.10	34.02	1.97		300	6.81	34.01	1.58		26.69	140.8	0.575
	317	6.70	34.00	1.32									
72.60K-22	E. W. SCRIPPS; October 14, 1950; 1200 GCT; 35°35.5'N, 122°07.5'W; sounding, 1,080 fm; wind, 320°, force 6; weather, overcast; sea, high; wire angle, 0°.												
	0	14.1	33.19	6.36		0	14.1	33.19	6.36		24.79	316.9	0.000
	10	13.78	33.19	5.91		10	13.78	33.19	5.91		24.86	310.7	0.031
	25	13.73	33.17	5.86		20	13.76	33.17	5.87		24.84	312.0	0.063
	50	10.78	33.37	4.48		30	13.57	33.19	5.79		24.90	307.1	0.093
	75	10.29	33.47	4.23		50	10.78	33.37	4.48		25.57	244.0	0.149
	99	9.65	33.62	3.65		75	10.29	33.47	4.23		25.73	228.6	0.208
	123	8.83	33.71	3.26		100	9.61	33.62	3.61		25.96	207.3	0.262
	152	8.45	33.83	2.82		150	8.46	33.82	2.87		26.30	175.8	0.358
	176	8.37	33.96	2.42		200	7.92	34.00	2.27		26.53	154.7	0.440
	200	7.92	34.00	2.27		250	7.29	34.08	1.91		26.68	141.4	0.515
	297	6.88	34.13	1.41		300	6.84	34.13	1.40		26.78	132.3	0.583
	399	6.12	34.21	0.85		400	6.12	34.21	0.83		26.94	118.2	0.708
	604	5.16	34.25	0.35		500	5.58	34.23	0.50		27.02	111.1	0.823
	761	4.61	34.35	0.38		600	5.18	34.25	0.35		27.08	105.8	0.931
	1052	3.64	34.47	0.63		700	4.82	34.31	0.36		27.17	98.0	1.033
						800	4.48	34.37	0.40		27.26	90.4	1.127
						1000	3.82	34.46	0.57		27.40	77.7	1.295

E. W. SCRIPPS; October 14, 1950; 1500 GCT; 35°35.5'N, 122°07.5'W; sounding, 1,080 fm; wind, 320°, force 6; weather, overcast; sea, high; wire angle, 0°. 72.60K-23

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
0	14.0	33.22	4.82		0	14.0	33.22	4.82		24.83	312.7	0.000
10	13.84	33.22	4.16		10	13.84	33.22	4.16		24.87	309.7	0.031
25	13.72	33.22	4.74		20	13.75	33.22	4.62		24.88	308.2	0.062
50	13.53	33.22	4.32		30	13.70	33.22	4.71		24.90	307.4	0.093
75	10.60	33.49	3.95		50	13.53	33.22	4.32		24.93	304.6	0.154
99	9.57	33.66	3.34		75	10.60	33.49	3.95		25.69	232.5	0.221
124	8.58	33.86	2.75		100	9.51	33.66	3.33		26.01	202.7	0.275
154	8.20	33.93	1.67		150	8.24	33.93	1.69		26.42	164.4	0.367
178	8.00	33.96	1.81		200	7.67	33.99	1.90		26.55	152.6	0.446
208	7.55	34.00	1.90		250	7.13	34.06	1.44		26.68	140.7	0.520
263	7.04	34.07	1.26		300	6.74	34.06	1.03		26.74	136.2	0.589
321	6.54	34.05	0.97									

E. W. SCRIPPS; October 14, 1950; 1800 GCT; 35°35.5'N, 122°07.5'W; sounding, 1,080 fm; wind, 300°, force 3; weather, overcast; sea, rough; wire angle, 0°. 72.60K-24

0	14.0	33.24	6.22		0	14.0	33.24	6.22		24.85	311.1	0.000
10	13.78	33.24	5.02		10	13.78	33.24	5.02		24.89	307.2	0.031
25	13.72	33.22	4.82		20	13.74	33.23	4.89		24.89	307.2	0.062
50	10.97	33.25	3.73		30	13.70	33.22	4.76		24.90	307.4	0.092
75	10.15	33.56	3.76		50	10.97	33.25	3.73		25.44	255.9	0.149
100	9.32	33.69	2.60		75	10.15	33.56	3.76		25.82	220.0	0.208
124	8.58	33.87	1.97		100	9.32	33.69	2.60		26.06	197.4	0.260
154	8.21	34.00	2.42		150	8.24	33.99	2.39		26.47	160.0	0.350
178	7.97	33.99	2.14		200	7.68	34.04	1.98		26.59	149.0	0.427
206	7.60	34.05	1.94		250	7.13	34.07	1.57		26.69	139.9	0.499
259	7.05	34.07	1.49		300	6.70	34.10	1.20		26.77	132.7	0.567
318	6.54	34.11	1.12									

E. W. SCRIPPS; October 14, 1950; 2100 GCT; 35°35.5'N, 122°07.5'W; sounding, 1,080 fm; wind, 320°, force 4; weather, overcast; sea, very rough; wire angle, 0°. 72.60K-25

0	14.1	33.18	5.97		0	14.1	33.18	5.97		24.78	317.7	0.000
10	13.73	33.21	4.35		10	13.73	33.21	4.35		24.88	308.2	0.031
25	12.22	33.31	5.08		20	13.20	33.26	5.00		25.03	294.6	0.061
50	10.53	33.42	4.20		30	11.55	33.34	5.02		25.40	258.8	0.089
74	9.56	33.60	2.72		50	10.53	33.42	4.20		25.65	235.8	0.139
99	8.78	33.73	2.88		75	9.53	33.60	2.73		25.96	207.0	0.194
123	8.52	33.80	2.68		100	8.78	33.73	2.87		26.18	186.3	0.243
152	8.25	33.89	2.55		150	8.26	33.88	2.54		26.38	168.4	0.332
176	8.09	33.96	2.61		200	7.83	33.96	2.20		26.50	157.1	0.414
206	7.77	33.96	2.07		250	7.32	34.02	1.80		26.62	146.3	0.489
259	7.22	34.04	1.78		300	6.78	34.07	1.44		26.74	135.9	0.559
319	6.58	34.07	1.25									

E. W. SCRIPPS; October 15, 1950; 0000 GCT; 35°35.5'N, 122°07.5'W; sounding, 1,080 fm; wind, 320°, force 4; weather, overcast; sea, very rough; wire angle, 0°. 72.60K-26

0	13.5	33.24	5.79		0	13.5	33.24	5.79		24.95	301.5	0.000
10	13.18	33.24	5.67		10	13.18	33.24	5.67		25.04	293.6	0.030
25	11.82	33.35	5.55		20	12.15	33.31	5.60		25.27	271.5	0.058
50	10.34	33.44	4.33		30	11.12	33.38	5.42		25.51	248.4	0.084
75	10.16	33.51	4.17		50	10.34	33.44	4.33		25.70	231.2	0.132
99	9.60	33.68	3.60		75	10.16	33.51	4.17		25.79	223.0	0.189
124	8.85	33.77	3.21		100	9.58	33.69	3.58		26.02	201.6	0.242
153	8.50	33.84	2.76		150	8.52	33.82	2.83		26.29	176.7	0.336
177	8.30	34.02	2.47		200	7.96	34.00	2.32		26.52	156.0	0.420
202	7.92	34.00	2.31		250	7.26	34.09	2.31		26.69	140.3	0.494
251	7.24	34.09	2.31		300	6.83	34.13	1.44		26.78	132.2	0.561
299	6.84	34.13	1.45		400	6.04	34.07	0.97		26.83	127.6	0.691
402	6.01	34.07	0.96		500	5.43	34.13	0.60		26.96	116.7	0.813
609	4.98	34.27	0.36		600	5.01	34.26	0.37		27.11	103.0	0.923
767	4.53	34.34	0.37		700	4.68	34.32	0.34		27.19	95.6	1.022
1058	3.64	34.49	0.71		800	4.46	34.36	0.39		27.25	90.9	1.117
					1000	3.86	34.46	0.63		27.39	78.1	1.285

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

72.60K-27 E. W. SCRIPPS; October 15, 1950; 0300 GCT; 35°35.5'N, 122°07.5'W; sounding, 1,080 fm; wind, 320°, force 5; weather, overcast; sea, very rough; wire angle, 0°.

0	13.4	33.24	5.88	0	13.4	33.24	5.88	24.97	299.4	0.000
10	13.15	33.19	6.44	10	13.15	33.19	6.44	24.98	298.6	0.030
25	13.12	33.19	6.27	20	13.13	33.19	6.34	24.99	298.4	0.060
50	11.75	33.31	5.61	30	13.12	33.20	6.15	25.00	297.8	0.090
75	10.27	33.39	4.35	50	11.75	33.31	5.61	25.34	265.7	0.146
99	9.10	33.64	3.48	75	10.27	33.39	4.35	25.67	234.4	0.208
124	8.48	33.82	2.72	100	9.05	33.65	3.44	26.07	196.3	0.262
153	8.12	33.89	2.56	150	8.16	33.89	2.56	26.40	166.2	0.353
178	7.84	33.96	2.22	200	7.38	33.99	2.40	26.59	148.5	0.432
207	7.27	34.00	2.40	250	6.96	34.06	1.73	26.71	138.4	0.503
261	6.92	34.07	1.52	300	6.66	34.09	1.35	26.77	132.9	0.571
321	6.44	34.09	1.32							

72.60K-28 E. W. SCRIPPS; October 15, 1950; 0600 GCT; 35°35.5'N, 122°07.5'W; sounding, 1,080 fm; wind, 320°, force 4; weather, overcast; sea, very rough; wire angle, 0°.

0	13.9	33.21	6.84	0	13.9	33.21	6.84	24.84	311.5	0.000
10	13.54	33.19	6.17	10	13.54	33.19	6.17	24.90	306.0	0.031
25	13.50	33.17	6.17	20	13.51	33.17	6.16	24.90	307.2	0.062
50	10.95	33.29	5.00	30	13.49	33.18	6.12	24.91	306.3	0.092
75	9.64	33.58	3.72	50	10.95	33.29	5.00	25.47	252.6	0.148
99	9.12	33.64	3.32	75	9.64	33.58	3.72	25.92	210.5	0.206
124	8.51	33.82	2.77	100	9.09	33.64	3.30	26.06	197.7	0.257
153	8.15	33.95	2.63	150	8.17	33.95	2.63	26.45	161.9	0.347
178	8.03	33.93	2.73	200	7.65	33.94	2.30	26.51	156.0	0.427
207	7.56	33.95	2.10	250	7.22	34.04	1.79	26.65	143.4	0.501
261	7.12	34.05	1.76	300	6.74	34.07	1.46	26.74	135.4	0.571
321	6.45	34.07	1.27							

72.60K-29 E. W. SCRIPPS; October 15, 1950; 0900 GCT; 35°35.5'N, 122°07.5'W; sounding, 1,080 fm; wind, 320°, force 3; weather, clear; sea, very rough; wire angle, 0°.

0	13.8	33.22	4.23	0	13.8	33.22	4.23	24.87	308.0	0.000
10	13.33	33.19	4.12	10	13.33	33.19	4.12	24.95	301.3	0.030
25	11.85	33.33	4.42	20	12.40	33.26	4.38	25.19	279.5	0.060
50	10.14	33.46	3.45	30	11.40	33.37	4.40	25.45	253.7	0.086
75	9.16	33.70	2.92	50	10.14	33.46	3.45	25.75	226.0	0.134
99	8.69	33.71	1.92	75	9.16	33.70	2.92	26.10	193.4	0.186
124	8.43	33.89	1.60	100	8.68	33.71	1.90	26.18	185.7	0.235
153	8.20	33.93	1.84	150	8.19	33.93	1.81	26.42	164.5	0.322
177	8.01	34.04r	2.05r	200	7.69	33.99	1.75	26.54	153.3	0.401
206	7.68	34.00	1.63	250	7.23	34.05	1.34	26.65	143.6	0.475
319	6.66	34.09	1.16	300	6.81	34.08	1.19	26.75	135.5	0.543

72.60K-30 E. W. SCRIPPS; October 15, 1950; 1200 GCT; 35°35.5'N, 122°07.5'W; sounding, 1,080 fm; wind, 320°, force 4; weather, overcast; sea, high; wire angle, 7°.

0	13.8	33.27	5.09	0	13.8	33.27	5.09	24.91	305.0	0.000
10	12.89	33.27	5.23	10	12.89	33.27	5.23	25.10	287.6	0.030
25	11.36	33.39	4.85	20	11.70	33.35	5.04	25.39	260.5	0.057
50	10.19	33.40	4.06	30	10.97	33.39	4.65	25.55	245.1	0.082
75	9.54	33.60	3.38	50	10.19	33.40	4.06	25.69	231.7	0.130
99	8.96	33.73	3.12	75	9.54	33.60	3.38	25.96	207.3	0.185
123	8.57	33.82	2.64	100	8.94	33.74	3.12	26.16	188.0	0.234
152	8.29	33.89	2.74	150	8.29	33.89	2.74	26.38	168.1	0.323
177	8.05	33.98	2.27	200	7.84	33.99	2.24	26.53	155.0	0.404
202	7.82	34.00	2.22	250	7.42	34.00	2.22	26.59	149.2	0.480
299	7.12	34.07	2.02	300	7.13	34.07	2.02	26.69	140.7	0.553
403	6.88	34.11	1.41	400	6.88	34.11	1.45	26.76	135.8	0.690
509	6.06	34.20	0.86	500	6.14	34.18	0.91	26.91	122.1	0.819
609	5.14	34.38	0.31	600	5.21	34.37	0.34	27.17	97.3	0.929
768	4.56	34.43	0.46	700	4.74	34.43	0.37	27.27	88.1	1.022
1055	3.64	34.51	0.56	800	4.48	34.43	0.50	27.30	86.0	1.110
				1000	3.85	34.49	0.56	27.42	75.8	1.271

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

E. W. SCRIPPS; October 15, 1950; 1500 GCT; 35°35.5'N, 122°07.5'W; sounding, 1,080 fm; wind, 310°, force 3; weather, overcast; sea, rough; wire angle, 0°. 72.60K-31

0	13.0	33.24a)	4.37	0	13.0	33.24	4.37	25.05	292.0	0.000
10	12.92	33.22	5.14	10	12.92	33.22	5.14	25.05	292.1	0.029
25	12.70	33.24	5.29	20	12.80	33.23	5.26	25.09	288.5	0.058
50	11.25	33.37	4.91	30	12.51	33.26	5.23	25.18	281.0	0.087
75	10.20	33.41	4.61	50	11.25	33.37	4.91	25.48	252.1	0.140
99	9.84	33.50	3.50	75	10.20	33.41	4.61	25.70	231.5	0.200
124	8.87	33.73	2.66	100	9.81	33.52	3.40	25.85	216.9	0.257
153	8.36	33.87	2.67	150	8.40	33.86	2.67	26.33	171.5	0.352
178	7.97	34.02	1.96	200	7.48	34.01	2.02	26.58	149.1	0.432
207	7.32	34.00	2.07	250	6.96	34.04	1.51	26.69	140.7	0.503
261	6.84	34.05	1.36	300	6.48	34.08	1.10	26.78	131.1	0.570
319	6.26	34.09	1.00							

E. W. SCRIPPS; October 15, 1950; 1800 GCT; 35°35.5'N, 122°07.5'W; sounding, 1,080 fm; wind, 320°, force 4; weather, overcast; sea, very rough; wire angle, 0°. 72.60K-32

0	13.2	33.24	6.19	0	13.2	33.24	6.19	25.01	295.6	0.000
10	12.99	33.23	6.08	10	12.99	33.23	6.08	25.05	292.4	0.029
25	12.95	33.24	-	20	12.95	33.24	5.85	25.06	291.4	0.059
50	10.53	33.40	4.76	30	12.90	33.26	5.55	25.09	289.2	0.088
74	9.44	33.62	3.78	50	10.53	33.40	4.76	25.63	237.4	0.140
99	8.78	33.78	3.00	75	9.42	33.63	3.72	26.00	203.1	0.195
123	8.46	33.87	2.80	100	8.77	33.78	3.00	26.22	182.5	0.244
152	8.01	33.96	2.58	150	8.03	33.96	2.59	26.47	159.1	0.329
177	7.85	33.97	2.49	200	7.70	34.00	2.19	26.55	152.3	0.407
206	7.62	34.01	2.09	250	7.11	34.02	1.90	26.65	143.4	0.481
259	7.00	34.02	1.90	300	6.77	34.04	1.61	26.72	138.0	0.551
320	6.62	34.06	1.41							

E. W. SCRIPPS; October 15, 1950; 2100 GCT; 35°35.5'N, 122°07.5'W; sounding, 1,080 fm; wind, 320°, force 3; weather, overcast; sea, very rough; wire angle, 0°. 72.60K-33

0	13.1	33.23	5.99	0	13.1	33.23	5.99	25.02	294.6	0.000
10	12.93	33.19	5.94	10	12.93	33.19	5.94	25.02	294.6	0.029
25	11.42	33.33	5.10	20	12.25	33.25	5.55	25.20	277.7	0.058
50	10.13	33.42	4.07	30	11.15	33.36	4.80	25.49	250.4	0.084
75	9.52	33.58	3.59	50	10.13	33.42	4.07	25.72	229.2	0.132
99	8.92	33.69	3.10	75	9.52	33.58	3.59	25.94	208.8	0.187
124	8.54	33.79	2.93	100	8.91	33.69	3.10	26.13	191.3	0.237
153	8.34	33.89	2.52	150	8.39	33.88	2.56	26.36	170.3	0.327
177	8.15	33.98	2.55	200	7.87	33.99	2.39	26.52	155.4	0.409
206	7.78	33.99	2.31	250	7.15	34.08	2.02	26.70	139.5	0.483
259	7.00	34.09	1.98	300	6.72	33.99	1.57	26.68	141.1	0.553
318	6.61	33.95	1.39							

a) Salinity bottle numbers were not recorded on the data sheet. Since standard handling and titrating procedures were used, these salinity values are assumed to be in the order listed.

SIO

CCOFI 5010

	OBSERVED					INTERPOLATED					COMPUTED		
	Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
	m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
72.60K-34	E. W. SCRIPPS; October 16, 1950; 0000 GCT; 35°35.5'N, 122°07.5'W; sounding, 1,080 fm; wind, 320°, force 2; weather, overcast; sea, rough; wire angle, 0°.												
	0	13.8	33.26	7.37		0	13.8	33.26	7.37		24.91	305.7	0.000
	10	13.09	33.26	6.72		10	13.09	33.26	6.72		25.05	292.1	0.030
	25	11.41	33.33	5.28		20	11.72	33.31	5.80		25.35	263.8	0.058
	50	10.14	33.44	4.29		30	10.85	33.35	4.95		25.54	246.0	0.083
	75	9.48	33.58	3.74		50	10.14	33.44	4.29		25.73	228.2	0.131
	100	9.01	33.69	3.07		75	9.48	33.58	3.74		25.95	207.4	0.185
	124	8.59	33.78	2.98		100	9.01	33.69	3.07		26.11	192.8	0.235
	154	8.34	33.93	2.52		150	8.36	33.93	2.59		26.40	166.2	0.325
	179	8.15	33.93	2.46		200	7.80	34.00	2.24		26.54	153.7	0.405
	202	7.78	34.00	2.22		250	7.35	34.04	1.93		26.64	145.2	0.479
	251	7.34	34.04	1.93		300	6.70	34.11	1.32		26.78	131.9	0.549
	300	6.70	34.11	1.32		400	6.08	34.13	0.86		26.88	123.7	0.676
	403	6.08	34.13	0.84		500	5.60	34.22	0.59		27.01	112.1	0.795
	608	5.14	34.31	0.37		600	5.17	34.31	0.39		27.13	101.2	0.902
	764	4.56	34.38	0.34		700	4.78	34.36	0.33		27.21	93.8	0.999
	1059	3.69	34.42	0.64		800	4.44	34.39	0.35		27.28	88.5	1.090
						1000	3.83	34.42	0.56		27.36	80.7	1.259
72.60K-35	E. W. SCRIPPS; October 16, 1950; 0300 GCT; 35°35.5'N, 122°07.5'W; sounding, 1,080 fm; wind, calm; weather, overcast; sea, rough; wire angle, 0°.												
	0	13.5	-	5.64		0	13.5	(33.30)	5.64		(25.00)	(296.9)	(0.000)
	10	13.07	33.28	5.88		10	13.07	33.28	5.88		25.07	290.6	0.029
	25	12.89	33.22	5.46		20	12.88	33.23	5.68		25.07	290.8	0.058
	50	11.12	33.39	4.43		30	12.84	33.24	5.22		25.08	289.5	0.087
	75	10.22	33.38	3.90		50	11.12	33.39	4.43		25.52	247.9	0.141
	100	9.40	33.63	3.21		75	10.22	33.38	3.90		25.67	234.5	0.202
	125	8.66	33.82	-		100	9.40	33.63	3.21		26.00	203.2	0.256
	154	8.33	33.93	2.22		150	8.38	33.92	2.27		26.39	167.2	0.349
	179	7.99	33.96	2.18		200	7.74	34.02	1.90		26.56	151.4	0.429
	208	7.66	34.02	1.79		250	7.16	34.02	1.70		26.65	144.1	0.502
	263	7.01	34.02	1.67		300	6.64	34.03	1.37		26.73	137.0	0.572
	321	6.44	34.04	1.12									
72.60K-36	E. W. SCRIPPS; October 16, 1950; 0600 GCT; 35°35.5'N, 122°07.5'W; sounding, 1,080 fm; wind, calm; weather, drizzle; sea, moderate; wire angle, 0°.												
	0	13.6	33.28	4.64		0	13.6	33.28	4.64		24.96	300.3	0.000
	10	13.13	33.25	5.47		10	13.13	33.25	5.47		25.03	293.8	0.030
	25	12.04	33.33	4.89		20	12.82	33.31	5.20		25.14	283.8	0.059
	50	10.41	33.35	4.35		30	11.30	33.34	4.72		25.45	254.5	0.085
	75	9.88	33.57	4.03		50	10.41	33.35	4.35		25.61	239.3	0.135
	100	8.93	33.74	2.96		75	9.88	33.57	4.03		25.90	212.7	0.191
	124	8.48	33.87	2.73		100	8.93	33.74	2.96		26.17	187.7	0.241
	154	8.35	33.98	2.39		150	8.37	33.98	2.40		26.44	162.6	0.329
	178	8.03	33.95	2.43		200	7.77	34.01	2.16		26.55	152.5	0.408
	207	7.70	34.00	2.04		250	7.13	33.99	1.99		26.63	145.9	0.482
	260	7.01	33.98	1.99		300	6.61	34.02	1.52		26.72	137.4	0.554
	318	6.48	34.04	1.18									

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

E. W. SCRIPPS; October 16, 1950; 0900 GCT; 35°35.5'N, 122°07.5'W; sounding, 1,080 fm; wind, 040°, force 2; weather, cloudy; sea, very rough; wire angle, 0°. 72.60K-37

0	13.7	33.25	5.54	0	13.7	33.25	5.54	24.92	304.5	0.000
10	13.20	33.24	5.65	10	13.20	33.24	5.65	25.01	295.8	0.030
25	11.44	33.33	4.80	20	11.85	33.30	5.30	25.32	266.8	0.058
50	9.93	33.53	3.85	30	11.25	33.37	4.53	25.48	251.4	0.084
75	9.26	33.64	2.87r	50	9.93	33.53	3.85	25.84	218.0	0.131
99	8.82	33.73	3.01	75	9.26	33.64	3.36	26.03	199.8	0.183
124	8.50	33.82	2.29r	100	8.81	33.73	3.01	26.18	186.8	0.232
138p	8.34	33.91	2.46	150	8.32	33.96	2.52	26.43	163.4	0.319
154	8.32	33.96	2.52	200	7.89	33.97	2.09	26.50	157.2	0.400
178	8.14	33.96	2.30	250	7.15	34.02	2.11	26.65	143.9	0.474
208	7.77	33.98	2.05	300	(6.60)					
262	7.00	34.02	2.15							

E. W. SCRIPPS: October 16, 1950; 1200 GCT; 35°35.5'N, 122°07.5'W; sounding, 1,080 fm; wind, 090°, force 2; weather, drizzle; sea, very rough; wire angle, 0°. 72.60K-38

0	13.7	33.24	6.26	0	13.7	33.24	6.26	24.91	305.2	0.000
10	13.08	33.30	6.13	10	13.08	33.30	6.13	25.08	289.2	0.030
25	10.96	33.33	4.73	20	11.80	33.32	5.32	25.34	264.5	0.057
50	9.94	33.49	4.06	30	10.80	33.35	4.55	25.55	245.2	0.083
75	9.36	33.64	3.44	50	9.94	33.49	4.06	25.80	221.3	0.130
100	8.79	33.75	3.16	75	9.36	33.64	3.44	26.02	201.2	0.182
124	8.50	33.86	2.71	100	8.79	33.75	3.16	26.19	185.0	0.231
154	8.36	33.95	2.30	150	8.37	33.95	2.31	26.42	164.8	0.318
178	8.16	33.96	2.26	200	7.81	34.04	2.24	26.57	150.9	0.397
203	7.76	34.04	2.23	250	7.20	34.04	1.93	26.66	143.1	0.470
251	7.19	34.04	1.91	300	6.78	34.09	1.41	26.75	134.6	0.540
300	6.78	34.09	1.41	400	6.05	34.11	0.94	26.87	124.8	0.669
403	6.04	34.11	0.93	500	5.74	34.20	0.60	26.97	115.4	0.790
609	5.36	34.31	0.36	600	5.40	34.30	0.37	27.10	104.9	0.900
766	4.62	34.38	0.33	700	4.93	34.36	0.32	27.20	95.7	1.000
1057	3.65	34.45	0.65	800	4.49	34.39	0.34	27.27	89.1	1.093
				1000	3.78	34.44	0.56	27.39	78.7	1.260

E. W. SCRIPPS; October 16, 1950; 1500 GCT; 35°35.5'N, 122°07.5'W; sounding, 1,080 fm; wind, 100°, force 4; weather, rain; sea, very rough; wire angle, 0°. 72.60K-39

0	13.4	33.24	6.08	0	13.4	33.24	6.08	24.97	299.4	0.000
10	13.01	33.28	6.36	10	13.01	33.28	6.36	25.08	289.5	0.029
25	12.02	33.32	5.52	20	12.45	33.31	5.93	25.21	276.9	0.058
50	10.72	33.40	4.62	30	11.93	33.34	5.44	25.33	265.5	0.085
55p	10.71	33.39r	4.51	50	10.72	33.40	4.62	25.60	240.6	0.136
75	9.96	33.55	4.02	75	9.96	33.55	4.02	25.85	217.4	0.193
85p	9.82	33.55r	3.84u	100	9.39	33.62	3.79	26.00	203.5	0.245
100	9.39	33.62	3.79	150	8.52	33.95	2.49	26.39	167.1	0.338
125	8.88	33.80	2.87	200	7.76	34.00	2.06	26.55	153.0	0.418
140p	8.68	33.93	2.60							
200p	7.76	34.00	2.06							

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

72.60K-40 E. W. SCRIPPS; October 16, 1950; 1800 GCT; 35°35.5'N, 122°07.5'W; sounding, 1,080 fm; wind, 130°, force 3; weather, overcast; sea, very rough; wire angle, 0°.

0	13.4		6.16	0	13.4		6.16			
10	13.13		6.48	10	13.13		6.48			
25	12.82		6.04	20	13.08		6.29			
50	10.60		4.54	30	11.90		5.70			
75	9.66		3.98	50	10.60		4.54			
99	8.76		3.22	75	9.66		3.98			
123	8.61		2.63	100	8.73		3.22			
152	8.26		2.44	150	8.28		2.44			
177	7.86		2.34	200	7.57		2.36			
205	7.52		2.38	250	7.04		1.97			
258	6.98		1.86	300	6.69		1.69			
317	6.60		1.67							

72.60K-41 E. W. SCRIPPS; October 16, 1950; 2100 GCT; 35°35.5'N, 122°07.5'W; sounding, 1,080 fm; wind, 120°, force 1; weather, fog; sea, moderate; wire angle, 0°.

0	13.7	33.26	6.52	0	13.7	33.26	6.52	24.93	303.7	0.000
10	13.02	33.35	6.20	10	13.02	33.35	6.20	25.13	284.5	0.029
25	10.86	33.48	5.52	20	11.32	33.46	5.79	25.54	245.7	0.056
50	10.04	33.51	4.37	30	10.58	33.49	5.26	25.70	231.2	0.080
75	9.36	33.62	3.87	50	10.04	33.51	4.37	25.80	221.4	0.125
100	8.70	33.77	3.12	75	9.36	33.62	3.87	26.00	202.9	0.178
124	8.60	33.95	3.02r	100	8.70	33.77	3.12	26.22	182.2	0.226
153	8.27	33.91	2.40	150	8.30	33.91	2.42	26.39	166.8	0.313
178	8.08	33.98	2.26	200	7.80	34.04	2.06	26.57	150.7	0.393
207	7.70	34.05	1.99	250	7.16	33.98	1.47	26.62	147.0	0.467
261	7.02	33.96	1.36	300	6.63	34.06	1.11	26.75	134.7	0.538
319	6.44	34.11	1.02							

72.60K-42 E. W. SCRIPPS; October 17, 1950; 0000 GCT; 35°35.5'N, 122°07.5'W; sounding, 1,080 fm; wind, 160°, force 2; weather, drizzle; sea, rough; wire angle, 0°.

0	13.7	33.28	5.61	0	13.7	33.28	5.61	24.94	302.3	0.000
10	13.25	33.30	6.31	10	13.25	33.30	6.31	25.05	292.4	0.030
25	11.41	33.40	4.29	20	12.50	33.36	4.60	25.24	274.2	0.058
50	10.22	33.51	3.91	30	10.93	33.42	4.18	25.58	242.2	0.084
75	9.68	33.59	3.44	50	10.22	33.51	3.91	25.77	224.2	0.130
100	8.98	33.73	2.11r	75	9.68	33.59	3.44	25.93	209.9	0.185
124	8.78	33.84	2.33	100	8.98	33.73	2.83	26.15	189.4	0.235
154	8.36	33.87	3.69r	150	8.42	33.87	2.06	26.34	171.5	0.325
179	8.09	33.98	1.84	200	7.72	33.91	1.58	26.48	159.2	0.417
203	7.68	33.91	1.53	250	7.04	34.07	1.20	26.70	138.7	0.482
252	7.03	34.07	1.99r	300	6.75	34.08	1.08	26.75	134.8	0.551
302	6.75	34.08	1.08	400	6.00	34.15	0.77	26.90	121.2	0.678
372	6.19	34.13	0.85	500	5.53	34.23	0.44	27.02	110.5	0.795
538	5.36	34.27	0.37	600	5.06	34.35	0.30	27.18	96.9	0.898
638	4.88	34.38	0.28	700	4.63	34.40	0.30	27.26	89.0	0.991
942	3.98	34.42	0.50	800	4.33	34.42	0.36	27.31	84.9	1.078
				1000	(3.86)	(34.42)		(27.36)	(81.1)	(1.244)

E. W. SCRIPPS; October 17, 1950; 0300 GCT; 35°35.5'N, 122°07.5'W; sounding, 1,080 fm; wind, 160°, force 1; weather, overcast; sea, rough; wire angle, 0°. 72.60K-43

OBSERVED					INTERPOLATED					COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m
0	13.6	33.22	5.55		0	13.6	33.22	5.55		24.92	304.7	0.000
10	13.27	33.26	4.22		10	13.27	33.26	4.22		25.01	295.9	0.030
25	12.75	33.19	4.45		20	13.15	33.21	4.40		25.00	297.3	0.060
50	10.64	33.44	2.81r		30	11.42	33.20	4.38		25.32	266.9	0.138
75	9.94	33.55	3.03		50	10.64	33.44	3.73		25.64	236.5	0.195
100	9.20	33.82	3.22r		75	9.94	33.55	3.03		25.85	217.4	0.245
124	8.60	33.80	2.60		100	9.20	33.82	2.75		26.18	186.1	0.334
154	8.25	33.91	2.22		150	8.30	33.90	2.28		26.39	167.5	0.334
178	7.93	33.98	1.96		200	7.55	34.00	1.89		26.58	150.2	0.414
207	7.46	34.00	1.83		250	7.03	34.01	1.64		26.66	143.0	0.486
260	6.96	34.01	1.57		300	6.70	34.05	1.25		26.73	136.4	0.557
319	6.60	34.07	1.11									

E. W. SCRIPPS; October 17, 1950; 0600 GCT; 35°35.5'N, 122°07.5'W; sounding, 1,080 fm; wind, 140°, force 2; weather, cloudy; sea, very rough; wire angle, 0°. 72.60K-44

0	13.7	33.17	6.69		0	13.7	33.17	6.69		24.86	310.3	0.000
10	13.36	33.28	7.02		10	13.36	33.28	7.02		25.01	295.8	0.030
25	12.56	33.31	6.39		20	13.02	33.31	6.77		25.10	287.5	0.059
50	10.59	33.42	4.71		30	11.75	33.33	5.93		25.36	263.1	0.087
75	9.85	33.53	4.31		50	10.59	33.42	4.71		25.64	236.8	0.137
100	9.00	33.71	3.28		75	9.85	33.53	4.31		25.85	217.3	0.194
124	8.44	33.84	2.92		100	9.00	33.71	3.28		26.13	191.1	0.245
154	8.22	33.89	2.89		150	8.25	33.93	2.87		26.42	164.6	0.334
178	7.98	33.89	2.86		200	7.66	33.97	2.76		26.54	153.9	0.414
207	7.56	34.00	-		250	7.05	34.09	2.09		26.72	137.4	0.486
261	6.93	34.11	1.94		300	6.61	34.05	1.64		26.74	135.2	0.555
320	6.46	34.02	1.57									

E. W. SCRIPPS; October 17, 1950; 0900 GCT; 35°35.5'N, 122°07.5'W; sounding, 1,080 fm; wind, 180°, force 1; weather, overcast; sea, very rough; wire angle, 0°. 72.60K-45

0	13.7	33.23	6.20		0	13.7	33.23	6.20		24.90	305.9	0.000
10	13.07	33.26	5.67		10	13.07	33.26	5.67		25.05	291.7	0.030
25	11.27	33.33	5.31		20	11.93	33.31	5.40		25.31	267.5	0.058
50	10.28	33.44	4.13		30	10.99	33.35	5.19		25.51	248.4	0.084
75	9.36	33.62	3.47		50	10.28	33.44	4.13		25.71	230.3	0.132
99	8.90	33.73	3.05		75	9.36	33.62	3.47		26.00	202.7	0.186
124	8.46	33.78	2.69		100	8.87	33.73	3.03		26.17	187.7	0.234
153	8.23	33.86	2.44		150	8.24	33.85	2.47		26.36	170.3	0.324
177	7.97	33.89	2.41		200	7.59	33.96	2.34		26.54	153.7	0.405
206	7.50	33.98	2.29		250	7.07	34.02	1.91		26.66	142.8	0.479
260	6.97	34.02	1.83		300	6.55	34.08	1.39		26.78	132.1	0.548
319	6.34	34.11	1.19									

E. W. SCRIPPS; October 17, 1950; 1200 GCT; 35°35.5'N, 122°07.5'W; sounding, 1,080 fm; wind, calm; weather, fog; sea, high; wire angle, 0°. 72.60K-46

0	13.5	33.30	6.25		0	13.5	33.30	6.25		25.00	296.9	0.000
10	12.92	33.21	6.11		10	12.92	33.21	6.11		25.04	292.8	0.029
25	11.32	33.36	5.03		20	11.75	33.27	5.41		25.31	267.3	0.057
50	10.35	33.66	4.13		30	11.05	33.50	4.81		25.62	238.4	0.083
75	9.50	33.64	3.33		50	10.35	33.66	4.13		25.87	215.2	0.128
99	9.00	33.69	3.32		75	9.50	33.64	3.33		25.99	203.6	0.180
124	8.46	33.84	3.07		100	8.97	33.70	3.31		26.13	191.4	0.230
153	8.21	33.89	2.31r		150	8.22	33.89	2.77		26.39	167.1	0.319
178	7.99	33.93	2.52		200	7.65	33.96	2.41		26.53	154.5	0.400
202	7.62	33.96	2.40		250	7.07	34.02	1.94		26.66	142.8	0.474
251	7.06	34.02	1.93		300	6.66	34.05	1.43		26.74	135.8	0.544
299	6.68	34.05	1.44		400	5.95	34.13	0.72		26.89	122.0	0.672
401	5.96	34.13	0.71		500	5.62	34.23	0.50		27.01	111.6	0.790
607	5.36	34.34	0.37		600	5.38	34.33	0.37		27.12	102.4	0.897
764	4.64	34.40	0.39		700	5.00	34.38	0.37		27.21	95.0	0.996
1055	3.64	34.47	0.67		800	4.45	34.41	0.40		27.29	87.1	1.087
					1000	3.78	34.46	0.59		27.40	77.2	1.251

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

72.60K-47 E. W. SCRIPPS; October 17, 1950; 1500 GCT; 35°35.5'N, 122°07.5'W; sounding, 1,080 fm; wind, calm; weather, cloudy; sea, high; wire angle, 0°.

0	13.5	33.17	5.81	0	13.5	33.17	5.81	24.90	306.5	0.000
10	13.15	33.22	5.72	10	13.15	33.22	5.72	25.01	296.4	0.030
25	12.15	33.35	5.32	20	12.90	33.33	5.47	25.14	283.8	0.059
50	10.45	33.32	4.57	30	11.35	33.35	5.15	25.45	254.6	0.086
75	9.73	33.62	3.51	50	10.45	33.32	4.57	25.59	242.0	0.136
99	8.99	34.22r	2.93	75	9.73	33.62	3.51	25.94	208.5	0.192
124	8.56	33.80	2.79	100	8.97	33.74	2.93	26.16	188.5	0.242
153	8.22	33.96	2.31	150	8.25	33.96	2.33	26.44	162.3	0.329
178	7.90	33.93	2.26	200	7.75	34.00	2.03	26.55	153.0	0.409
207	7.71	34.02	1.95	250	7.17	34.06	1.78	26.68	141.2	0.482
261	7.05	34.37r	1.76	300	6.62	34.05	1.50	26.74	135.3	0.551
320	6.47	34.05	1.32							

72.60K-48 E. W. SCRIPPS; October 17, 1950; 1800 GCT; 35°35.5'N, 122°07.5'W; sounding, 1,080 fm; wind, calm; weather, cloudy; sea, high; wire angle, 0°.

0	13.6	33.24	5.06	0	13.6	33.24	5.06	24.93	303.6	0.000
10	13.14	33.24	5.42	10	13.14	33.24	5.42	25.02	294.7	0.030
25	13.16	33.21	5.29	20	13.15	33.22	5.38	25.01	296.6	0.059
50	10.31	33.58	3.67	30	12.00	33.22	5.06	25.23	275.6	0.088
75	9.78	33.62	3.06	50	10.31	33.58	3.67	25.81	220.7	0.138
99	9.07	33.69	2.63	75	9.78	33.62	3.06	25.93	209.3	0.191
124	8.70	33.84	2.56	100	9.05	33.70	2.62	26.11	192.6	0.242
154	8.46	33.98	2.20	150	8.50	33.97	2.25	26.41	165.3	0.331
178	7.98	34.00	2.37r	200	7.78	34.06	1.66	26.59	149.0	0.410
208	7.70	34.09	1.62	250	7.11	34.06	1.70	26.68	140.4	0.482
262	6.97	34.04	1.73	300	6.64	34.05	1.54	26.74	135.6	0.552
322	6.50	34.07	1.39							

72.60K-49 E. W. SCRIPPS; October 17, 1950; 2100 GCT; 35°35.5'N, 122°07.5'W; sounding, 1,080 fm; wind, 340°, force 1; weather, partly cloudy; sea, very rough; wire angle, 0°.

0	14.8	33.24	4.49	0	14.8	33.24	4.49	24.68	327.1	0.000
10	13.11	33.24	4.89	10	13.11	33.24	4.89	25.03	294.3	0.031
25	11.07	33.31	4.18	20	11.60	33.28	4.56	25.35	263.9	0.059
50	9.91	33.40	3.47	30	10.60	33.33	3.96	25.57	243.3	0.084
75	9.73	33.57	3.09	50	9.91	33.40	3.47	25.74	227.3	0.131
100	8.80	33.73	2.81	75	9.73	33.57	3.09	25.90	212.4	0.186
152	8.13	33.89	1.51	100	8.80	33.73	2.81	26.18	186.7	0.236
186	7.61	34.00	1.08	150	8.15	33.89	1.57	26.40	166.1	0.324

72.60K-50 E. W. SCRIPPS; October 18, 1950; 0000 GCT; 35°35.5'N, 122°07.5'W; sounding, 1,080 fm; wind, 340°, force 2; weather, partly cloudy; sea, very rough; wire angle, 0°.

0	14.2	33.55r	6.51	0	14.2	(33.21)	6.51	(24.78)	(317.2)	(0.000)
10	13.18	33.21	6.16	10	13.18	33.21	6.16	24.99	297.5	0.031
25	10.75	33.28	5.13	20	11.04	33.24	5.37	25.42	257.2	0.058
50	10.22	33.46	4.65	30	10.60	33.31	5.00	25.55	244.8	0.084
75	9.35	33.66	3.32	50	10.22	33.46	4.65	25.73	227.9	0.131
99	8.82	33.82	3.16	75	9.35	33.66	3.32	26.03	199.8	0.184
124	8.60	33.86	2.59	100	8.81	33.82	3.14	26.25	180.1	0.232
153	8.18	33.95	2.35	150	8.20	33.94	2.35	26.43	163.1	0.317
179	8.10	34.11	2.31	200	7.87	34.06	2.11	26.58	150.3	0.396
202	7.85	34.05	2.10	250	7.22	34.02	1.85	26.64	144.9	0.470
252	7.21	34.02	1.85	300	6.65	34.05	1.45	26.74	135.7	0.540
301	6.64	34.05	1.45	400	6.15	34.12	0.68	26.86	125.4	0.670
404	6.13	35.19r	0.66	500	5.59	34.20	0.44	26.99	113.5	0.790
610	5.18	34.27	0.39	600	5.22	34.26	0.40	27.09	105.6	0.900
769	4.64	34.34	0.36	700	4.88	34.31	0.37	27.16	98.7	1.002
1056	3.69	35.28r	0.77	800	4.54	(34.35)	(0.38)	(27.23)	(92.6)	(1.097)
				1000	3.87		(0.64)			

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

E. W. SCRIPPS; October 18, 1950; 0300 GCT; 35°35.5'N, 122°07.5'W; sounding, 1,080 fm; wind, 320°, force 2; weather, partly cloudy; sea, very rough; wire angle, 0°. 72.60K-51

0	13.8	33.28	6.08	0	13.8	33.28	6.08	24.92	304.2	0.000
10	13.38	33.24	6.19	10	13.38	33.24	6.19	24.98	299.3	0.030
25	12.20	33.24	5.55	20	12.90	33.24	5.88	25.07	290.4	0.060
50	10.30	33.39	4.47	30	11.10	33.25	5.26	25.42	257.7	0.087
75	9.70	33.60	3.66	50	10.30	33.39	4.47	25.67	234.4	0.136
100	9.06	33.69	3.41	75	9.70	33.60	3.66	25.93	209.7	0.192
124	8.54	33.84	2.86	100	9.06	33.69	3.41	26.11	193.4	0.242
153	8.19	33.95	2.52	150	8.22	33.95	2.55	26.44	162.6	0.331
178	8.12	33.93	-	200	7.86	34.04	2.19	26.56	151.6	0.410
207	7.74	34.05	2.15	250	7.12	34.03	1.89	26.66	142.8	0.483
261	7.00	34.03	1.82	300	6.70	34.06	1.54	26.74	135.6	0.553
320	6.60	34.07	1.41							

E. W. SCRIPPS; October 18, 1950; 0600 GCT; 35°35.5'N, 122°07.5'W; sounding, 1,080 fm; wind, 320°, force 4; weather, clear; sea, very rough; wire angle, 0°. 72.60K-52

0	13.9	33.24	5.81	0	13.9	33.24	5.81	24.87	309.1	0.000
10	13.45	33.24	6.16	10	13.45	33.24	6.16	24.96	300.6	0.030
25	12.70	33.24	5.98	20	12.95	33.24	6.07	25.06	291.4	0.060
50	10.24	33.39	4.76	30	12.25	33.25	5.82	25.20	277.9	0.089
75	9.52	33.62	3.58	50	10.24	33.39	4.76	25.67	233.6	0.140
99	8.76	33.75	3.09	75	9.52	33.62	3.58	25.98	205.4	0.195
123	8.49	33.86	2.67	100	8.76	33.76	3.08	26.21	183.8	0.243
152	8.25	33.95	2.51	150	8.26	33.95	2.53	26.43	163.2	0.330
176	8.16	33.96	2.35	200	7.75	34.04	2.17	26.58	150.0	0.409
205	7.62	34.04	2.14	250	6.97	34.01	1.87	26.66	142.2	0.481
258	6.89	34.00	1.83	300	6.50	34.03	1.51	26.74	135.2	0.551
317	6.37	34.04	1.38							

E. W. SCRIPPS; October 18, 1950; 0900 GCT; 35°35.5'N, 122°07.5'W; sounding, 1,080 fm; wind, 320°, force 4; weather, clear; sea, very rough; wire angle, 0°. 72.60K-53

0	13.8	33.22	6.11	0	13.8	33.22	6.11	24.87	208.6	0.000
10	13.26	33.22	6.13	10.	13.26	33.22	6.13	24.98	298.5	0.030
25	11.39	33.35	5.16	20	12.13	33.30	5.80	25.27	271.8	0.059
75	9.14	33.69	3.38	30	11.10	33.39	4.82	25.53	247.3	0.085
100	8.63	-	2.87	50	10.11	33.55	4.05	25.82	219.4	0.132
124	8.42	33.86	2.51	75	9.14	33.69	3.38	26.09	194.4	0.183
153	8.15	33.89	2.44	100	8.63	33.79	2.87	26.25	179.6	0.230
177	7.94	33.96	2.40	150	8.17	33.89	2.44	26.40	166.4	0.316
206	7.57	33.98	2.14	200	7.65	33.98	2.21	26.55	153.1	0.397
258	6.96	33.96	1.81	250	7.02	33.96	1.86	26.62	146.6	0.471
318	6.38	34.07	1.38	300	6.54	34.04	1.52	26.75	135.0	0.542

PAOLINA-T; November 14, 1950; 1614 GCT; 34°34'N, 120°51'W; sounding, 145 fm; wind, 260°, force 2; weather, partly cloudy; sea, moderate; wire angle, 5°. 79.54

0	14.29	33.48		0	14.29	33.48		24.97	299.4	0.000
10	14.31	33.36		10	14.31	33.36		24.87	308.5	0.030
25	14.04	33.46		20	14.20	33.42		24.95	302.4	0.061
50	11.65	33.31		30	13.85	33.46		25.05	292.8	0.091
75	10.46	33.57		50	11.65	33.31		25.36	263.2	0.146
100	9.62	33.64		75	10.46	33.57		25.78	224.1	0.207
124	9.24	33.88		100	9.62	33.64		25.97	206.0	0.261
149	8.99	33.92		150	(8.97)	(33.92)		(26.30)	(176.1)	(0.356)

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

83.50 PAOLINA-T; November 13, 1950; 1720 GCT; 33°50'N, 120°07'W; sounding, 210 fm; wind, 180°, force 3; weather, squally; sea, slight; wire angle, 12°.

0	15.12	33.51	0	15.12	33.51	24.82	314.0	0.000
10	15.00	33.57	10	15.00	33.57	24.89	307.4	0.031
24	14.44	33.48	20	14.72	33.48	24.88	308.5	0.062
49	11.11	33.49	30	13.65	33.48	25.11	287.4	0.092
73	9.96	33.62	50	11.00	33.49	25.62	238.7	0.144
98	9.59	33.75	75	9.94	33.63	25.91	211.3	0.201
122	9.10	33.98	100	9.54	33.76	26.08	195.8	0.251
151	8.79	34.05	150	8.79	34.05	26.43	163.7	0.341
200	8.49	34.05	200	8.49	34.05	26.48	159.9	0.423
259	8.10	34.29	250	8.16	34.28	26.71	139.1	0.497
307	7.75	34.22	300	7.79	34.24	26.73	137.5	0.566

83.51 PAOLINA-T; November 12, 1950; 2225 GCT; 33°53'N, 120°12'W; sounding, 100 fm; wind, calm; weather, cloudy; sea, slight; wire angle, 0°.

0	15.35	33.46	0	15.35	33.46	24.73	322.8	0.000
10	-	33.54	10	15.11	33.54	24.84	312.2	0.032
25	14.44	33.58	20	14.72	33.57	24.95	302.2	0.062
50	11.46	-	30	13.97	33.59	25.12	286.1	0.092
75	10.75	33.65	50	11.46	33.62	25.64	237.6	0.144
100	9.78	33.69	75	10.75	33.65	25.79	223.5	0.202
125	9.14	33.91	100	9.78	33.69	25.99	204.6	0.255
150	9.07	33.86	150	9.07	33.86	26.24	182.1	0.352

83.60 PAOLINA-T; November 12, 1950; 1400 GCT; 33°33'N, 128°48'W; sounding, 2,005 fm; wind, 340°, force 1; weather, clear; sea, moderate; wire angle, 13°.

0	-	-	0	(16.05)	(33.16)	(24.34)	(359.2)	(0.000)
10	16.04	33.15	10	16.04	33.15	24.34	360.0	0.036
24	-	33.10	20	16.05	33.11	24.30	363.5	0.072
49	12.05	33.06	30	16.06	33.09	24.29	365.4	0.109
73	9.53	33.01	50	11.85	33.05	25.12	285.9	0.174
97	9.22	33.31	75	9.49	33.01	25.50	250.1	0.241
149	8.60	33.84	100	9.20	33.36	25.82	220.1	0.299
245	7.31	34.09	150	8.58	33.85	26.30	175.4	0.399
392	6.20	34.25	200	7.85	34.00	26.53	154.4	0.481
587	5.08	34.29	250	7.25	34.10	26.70	139.4	0.555
880	4.12	34.47	300	6.82	34.16	26.80	129.8	0.621
1179	3.42	34.54	400	6.14	34.25	26.96	115.5	0.744
			500	5.54	34.28	27.06	106.9	0.855
			600	5.03	34.29	27.13	101.0	0.959
			700	4.66	34.34	27.21	93.8	1.056
			800	4.36	34.41	27.30	86.0	1.146
			1000	3.84	34.51	27.43	74.2	1.307

83.70 PAOLINA-T; November 12, 1950; 0755 GCT; 33°15'N, 121°26'W; sounding, 2,000 fm; wind, 340°, force 1; weather, clear; sea, moderate; wire angle, 3°.

0	16.28	33.33	0	16.28	33.33	24.42	351.8	0.000
10	16.28	33.33	10	16.28	33.33	24.42	351.9	0.035
25	16.08	33.37	20	16.28	33.36	24.44	350.2	0.070
50	12.09	33.28	30	15.50	33.37	24.63	333.0	0.104
75	9.81	33.51	50	12.10	33.28	25.26	273.5	0.165
100	9.00	33.77	75	9.83	33.51	25.84	218.4	0.227
125	8.27	33.82	100	9.00	33.77	26.18	186.7	0.277
154	7.90	33.84	150	7.95	33.84	26.39	166.9	0.366
204	7.41	33.98	200	7.43	33.96	26.56	151.5	0.445
258	7.16	34.09	250	7.21	34.08	26.69	140.3	0.518
313	6.86	34.19	300	6.93	34.16	26.79	131.3	0.586

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

83.80

PAOLINA-T; November 12, 1950; 0228 GCT; 32°56'N, 122°02'W; sounding, 2,000 fm; wind, 060°, force 1; weather, clear; sea, slight; wire angle, 9°.

0	18.32	33.28	0	18.32	33.28	23.90	401.6	0.000
10	17.41	33.22	10	17.41	33.22	24.08	385.0	0.039
25	16.36	33.04	20	16.72	33.10	24.14	378.8	0.077
49	11.18	32.95	30	15.75	32.97	24.26	367.6	0.115
74	9.45	33.12	50	11.12	32.95	25.18	280.6	0.180
98	9.18	33.37	75	9.15	33.13	25.65	235.9	0.244
122	9.11	33.77	100	9.18	33.39	25.85	217.7	0.301
151	8.58	33.89	150	8.63	33.89	26.33	173.1	0.399
200	7.97	34.09	200	7.97	34.09	26.58	149.5	0.479
255	7.48	34.07	250	7.50	34.07	26.64	145.1	0.553
310	7.32	34.13	300	7.35	34.12	26.70	140.1	0.624

83.90

PAOLINA-T; November 11, 1950; 1958 GCT; 32°41'N, 122°51'W; sounding, 2,200 fm; wind, 060°, force 1; weather, clear; sea, rough; wire angle, 4°.

0	-	-	0	(17.70)	(33.08)	(23.90)	(401.8)	(0.000)
10	17.51	33.10	10	17.51	33.10	23.96	396.5	0.040
25	17.61	33.17	20	17.58	33.16	23.99	393.8	0.079
49	16.61	33.19	30	17.62	33.18	23.99	393.6	0.119
74	13.53	33.08	50	16.60	33.19	24.24	370.9	0.195
98	10.48	33.08	75	13.50	33.08	24.83	315.0	0.281
151	8.84	33.57	100	10.40	33.08	25.41	259.9	0.353
248	7.78	34.13	150	8.87	33.57	26.04	200.5	0.468
397	6.07	34.21	200	8.24	33.96	26.44	163.1	0.559
597	4.68	34.32	250	7.75	34.13	26.65	144.2	0.635
895	4.12	34.47	300	7.17	34.18	26.77	133.1	0.705
1198	3.28	34.58	400	6.06	34.21	26.94	117.6	0.830
			500	5.20	34.23	27.06	106.4	0.942
			600	4.67	34.32	27.20	94.4	1.043
			700	4.39	34.38	27.27	87.6	1.134
			800	4.22	34.43	27.33	82.9	1.219
			1000	3.85	34.51	27.43	74.3	1.376

83.100

PAOLINA-T; November 11, 1950; 1355 GCT; 32°29'N, 123°29'W; sounding, 2,000 fm; wind, 040°, force 1; weather, cloudy; sea, rough; wire angle, 0°.

0	-	-	0	(19.09)	(33.37)	(23.77)	(413.4)	(0.000)
10	19.09	33.35	10	19.09	33.35	23.76	413.5	0.041
25	19.15	33.31	20	19.13	33.32	23.73	418.7	0.083
50	19.53	33.58	30	19.23	33.31	23.69	422.1	0.125
74	16.08	33.31	50	19.53	33.58	23.82	410.5	0.208
99	13.40	33.26	75	16.07	33.30	24.45	351.6	0.304
152	9.70	33.26	100	13.35	33.26	25.00	299.5	0.385
172p	8.40u	33.48	150	9.80	33.26	25.65	237.9	0.519
250	7.98	33.98	200	8.58	33.80	26.27	180.0	0.624
405	6.23	34.22	250	7.98	33.98	26.50	158.5	0.709
606	4.97	34.27	300	7.40	34.08	26.66	143.7	0.784
			400	6.28	34.21	26.91	120.3	0.916
			500	5.46	34.25	27.05	108.1	1.030
			600	4.99	34.27	27.12	102.0	1.135

83.120

PAOLINA-T; November 10, 1950; 1814 GCT; 31°42'N, 124°51'W; sounding, 2,460 fm; wind, 350°, force 2; weather, overcast; sea, high; wire angle, 7°.

0	19.55	33.46	0	19.55	33.46	23.73	418.1	0.000
10	19.56	33.44	10	19.56	33.44	23.71	419.9	0.042
25	19.68	33.46	20	19.66	33.46	23.70	421.4	0.084
49	18.73	33.40	30	19.68	33.45	23.69	423.0	0.126
74	15.60	33.39	50	18.71	33.40	23.89	404.2	0.209
99	13.34	33.19	75	15.55	33.39	24.63	333.9	0.301
124	12.55	33.53	100	13.27	33.19	24.96	303.1	0.381
154	11.15	33.46	150	11.47	33.46	25.51	251.3	0.519
204	8.63	33.80	200	8.75	33.78	26.22	184.0	0.628
259	7.87	33.98	250	8.00	33.97	26.49	159.6	0.714
314	7.16	33.99	300	7.32	33.99	26.60	149.3	0.791

SIO

CCOFI 5011

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

84.48 PAOLINA-T; November 15, 1950; 1705 GCT; 33°53.5'N, 119°46'W; sounding, 650 fm; wind, 200°, force 1; weather, partly cloudy; sea, slight; wire angle, 6°.

0	15.06	33.46	0	15.06	33.46	24.70	316.4	0.000
10	14.92	33.46	10	14.92	33.46	24.83	313.4	0.031
25	14.43	33.46	20	14.62	33.46	24.89	307.9	0.063
50	11.02	33.53	30	14.07	33.46	25.00	297.1	0.093
74	9.96	33.60	50	11.02	33.53	25.66	234.5	0.146
99	9.68	33.77	75	9.95	33.60	25.89	213.7	0.202
124	9.33	33.89	100	9.67	33.78	26.08	196.4	0.253
153	9.01	33.99	150	9.03	33.98	26.34	172.6	0.345
203	8.84	34.02	200	8.86	34.02	26.39	167.9	0.431
257	8.37	34.10	250	8.43	34.08	26.51	157.9	0.512
312	8.00	34.14	300	8.06	34.14	26.61	148.8	0.588

88.36 PAOLINA-T; November 16, 1950; 1705 GCT; 33°35.5'N; 118°26.5'W; sounding, 450 fm; wind, 340°, force 1; weather, partly cloudy; sea, slight; wire angle, 0°.

0	16.90	33.51	0	16.90	33.51	24.42	352.1	0.000
10	16.92	33.60	10	16.92	33.60	24.48	346.3	0.035
25	14.81	33.46	20	16.00	33.46	24.58	336.8	0.069
50	11.41	33.46	30	14.05	33.46	25.01	296.7	0.101
75	10.54	33.58	50	11.41	33.46	25.52	248.1	0.155
100	10.06	33.69	75	10.54	33.58	25.77	224.8	0.214
125	9.31	33.78	100	10.06	33.69	25.94	209.2	0.269
155	9.00	33.96	150	9.04	33.93	26.30	176.4	0.365
205	8.80	34.13	200	8.82	34.12	26.48	159.9	0.449
260	8.40	34.23	250	8.50	34.22	26.61	148.6	0.526
315	7.70	34.14	300	7.90	34.17	26.66	144.2	0.599

91.39 PAOLINA-T; November 17, 1950; 1655 GCT; 33°00'N, 118°29'W; sounding, 650 fm; wind, 340°, force 2; weather, drizzle; sea, slight; wire angle, 0°.

0	15.99	33.42	0	15.99	33.42	24.56	339.0	0.000
10	15.94	33.43	10	15.94	33.43	24.57	337.7	0.034
25	14.75	33.39	20	15.50	33.40	24.65	330.5	0.067
50	11.04	33.48	30	14.05	33.39	24.95	301.9	0.099
75	9.99	-	50	11.04	33.48	25.61	240.1	0.153
100	9.61	-	75	9.99				
125	9.34	-	100	9.61				
155	8.93	-	150	8.97				
205	8.70	-	200	8.72				
260	8.20	-	250	8.29				
315	7.82	-	300	7.91				

95.31 PAOLINA-T; November 18, 1950; 1701 GCT; 32°40'N, 117°26'W; sounding, 225 fm; wind, 120°, force 2; weather, fog in patches; sea, rough; wire angle, 0°.

0	17.11	0	17.11
10	17.03	10	17.03
24	12.38	20	14.25
49	11.19	30	12.00
74	10.45	50	11.15
98	10.20	75	10.43
123	9.77	100	10.16
152	9.33	150	9.35
201	8.83	200	8.85
255	8.42	250	8.46
313	8.02	300	8.12

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
CREST; November 21, 1950; 1953 GCT; 32°12.5'N, 117°17.5'W; sounding, 780 fm; wind, 320°, force 4; weather, overcast; sea, very rough; wire angle, 26°.													97.32
0	17.42	33.53	5.30	0.64	0	17.42	33.53	5.30	0.64	24.31	362.4	0.000	
9	17.38	33.53	5.34	0.66	10	17.39	33.53	5.35	0.66	24.32	362.2	0.036	
22	17.15	33.51	5.46	0.69	20	17.17	33.51	5.45	0.68	24.35	359.0	0.072	
45	12.25	33.17	5.41	1.02	30	16.00	33.37	5.48	0.77	24.52	343.7	0.107	
67	10.86	33.31	4.98	1.40	50	11.70	33.17	5.37	1.10	25.25	274.4	0.169	
89	10.45	33.49	4.21	1.66	75	10.66	33.37	4.75	1.50	25.59	242.3	0.234	
177p	8.92	34.05	2.37	2.60	100	10.25	33.60	3.87	1.80	25.84	219.1	0.292	
304p	7.41	34.15	1.64	3.12	150	9.36	34.00	2.78	2.42	26.30	176.2	0.390	
397p	6.83	34.29	0.64	3.50	200	8.53	34.08	2.21	2.71	26.49	158.5	0.474	
494p	6.26	34.33	0.53	3.79	250	7.88	34.11	1.95	2.93	26.61	147.5	0.551	
702p	5.14	34.51	0.36	3.80	300	7.43	34.15	1.66	3.11	26.71	139.0	0.622	
911p	4.19	34.50	0.46	3.79a)	400	6.81	34.29	0.64	3.51	26.91	121.5	0.752	
1123p	3.52	34.53	0.64	3.49r	500	(6.23)	(34.33)	(0.52)	(3.79)	(27.02)	(112.1)	(0.869)	
					600	(5.65)	(34.42)	(0.44)	(3.79)	(27.16)	(99.2)	(0.975)	
					700	(5.14)	(34.51)	(0.37)	(3.80)	(27.29)	(87.2)	(1.068)	
					800	4.68	34.51	0.39	3.80	27.35	82.5	(1.152)	
					1000	3.84	34.51	0.53		27.43	74.2	(1.310)	
CREST; November 21, 1950; 1416 GCT; 31°41'N, 116°48'W; sounding, 270 fm; wind, 320°, force 5; weather, fog; sea, rough; wire angle, 26°.													100.30
0	14.60	33.44	5.31	0.76	0	14.60	33.44	5.31	0.76	24.88	308.8	0.000	
10	14.60	33.38	5.30	0.79	10	14.60	33.38	5.30	0.79	24.83	313.1	0.031	
24	11.65	33.39	4.95	1.26	20	14.45	33.39	5.19	1.16	24.87	309.6	0.062	
47	10.70	33.53	4.46	1.54	30	11.30	33.40	4.80	1.36	25.50	250.0	0.091	
69	9.97	33.62	3.87	1.77	50	10.57	33.55	4.38	1.57	25.74	227.0	0.137	
91	9.64	33.82	3.21	2.19	75	9.45	33.65	3.68	1.86	26.01	202.0	0.191	
139	9.41	34.05	2.06	2.50	100	9.65	33.90	2.94	2.26	26.17	187.2	0.240	
183	9.05	34.07	1.78	2.72	150	9.32	34.06	1.98	2.55	26.35	171.1	0.330	
227	8.70	34.18	1.41	2.92	200	8.93	34.10	1.64	2.80	26.45	163.1	0.414	
271	8.40	34.23	1.19	3.04	250	8.61	34.21	1.28	2.99	26.58	151.0	0.492	
320	7.91	34.28	0.97	3.09	300	8.11	34.26	1.05	3.07	26.70	140.7	0.565	
366	7.30	34.24	0.87	3.23	400	6.92	34.25	0.70	3.27	26.86	126.0	0.698	
414	6.78	34.26	0.59	3.27									
CREST; November 21, 1950; 0414 GCT; 30°39.5'N, 116°32.5'W; sounding, 630 fm; wind, 340°, force 5; weather, clear; sea, very rough; wire angle, 30°.													105.35
0	14.70	33.33	5.63	0.68	0	14.70	33.33	5.63	0.68	24.77	318.5	0.000	
9	14.58	33.35	5.79	0.69	10	14.58	33.35	5.80	0.69	24.81	314.9	0.032	
22	13.67	33.33	5.30	0.79	20	14.55	33.33	5.40	0.76	24.80	316.0	0.063	
44	11.40	33.47	4.25	1.31	30	12.50	33.35	4.80	0.95	25.23	275.1	0.093	
65	10.99	33.58	3.49	1.80	50	11.24	33.50	4.05	1.48	25.59	242.1	0.144	
86	10.84	33.69	3.08	1.95	75	10.93	33.63	3.31	1.88	25.74	227.7	0.203	
131	10.05	33.93	2.42	2.46	100	10.65	33.78	2.85	2.09	25.91	212.4	0.258	
171	9.56	33.98	2.42r	2.69	150	9.75	33.96	(2.18)	2.59	26.20	185.4	0.358	
252	9.19	34.38	1.04	2.88	200	9.44	34.06	(1.55)	2.78	26.33	174.0	0.447	
337	7.91	34.26	0.94	2.92	250	9.21	34.38	(1.05)	2.88	26.62	147.7	0.528	
418	7.35	34.31	0.59	3.06	300	8.50	34.32	0.98	2.92	26.68	142.1	0.600	
505	6.37	34.31	0.41	3.17	400	7.50	34.30	0.67	3.01	26.82	130.5	0.737	
590	5.80	34.38	0.36	3.25	500	6.42	34.31	0.42	3.16	26.97	116.2	0.860	
680	5.31	34.43	0.38	3.31	600	5.76	34.39	0.36	3.25	27.12	102.8	0.969	
868	4.36	34.47	0.43	3.50	700	5.20	34.43	0.39	3.33	27.22	93.9	1.068	
					800	4.68	34.46	0.42	3.43	27.31	86.2	1.158	
					1000	(4.00)	(34.48)			(27.39)	(78.3)	(1.323)	

a) Alternate value, 3.61 μg at/L, not used in interpolation.

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

110.35 CREST; November 20, 1950; 2024 GCT; 29°48'N, 116°00'W; sounding 600 fm; wind, 290°, force 4; weather, partly cloudy; sea, rough; wire angle, 20°.

0	16.49	33.51	5.41	0.55	0	16.49	33.51	5.41	0.55	24.51	343.5	0.000
9	16.43	33.53	5.57	0.58	10	16.42	33.53	5.58	0.58	24.54	340.6	0.034
23	14.34	33.37	5.68	0.60	20	14.85	33.37	5.65	0.59	24.77	319.2	0.067
46	12.80	33.41	5.55	0.96	30	13.81	33.37	5.67	0.66	24.99	298.6	0.098
69	10.50	33.59	3.73	1.79	50	12.25	33.44	5.00	1.07	25.35	264.4	0.154
92	9.73	33.69	3.47	1.95	75	10.18	33.61	3.63	1.88	25.86	216.7	0.214
141	9.51	34.05	2.34	2.40	100	9.61	33.73	3.40	1.99	26.05	199.1	0.266
186	9.72	34.36	1.37	1.95r	150	9.56	34.27	2.07	(2.49)	26.48	159.4	0.356
276	8.85	34.36	0.74	3.20	200	9.66	34.36	1.20	(2.85)	26.53	155.4	0.434
370	7.42	34.33	0.55	3.37	250	9.21	34.36	0.81	(3.12)	26.60	149.2	0.511
462	6.72	34.34	0.31	3.58	300	8.44	34.35	0.69	3.25	26.72	139.0	0.583
560	6.04	34.35	0.34	3.59	400	7.17	34.33	0.46	3.45	26.89	123.6	0.714
655	5.48	34.40	0.32	3.60	500	6.45	34.35	0.31	3.59	27.00	113.6	0.833
756	4.96	34.40	0.38	3.54	600	5.80	34.37	0.33	3.59	27.10	104.8	0.942
854	4.53	34.43	0.48	3.56	700	5.23	34.40	0.34	3.58	27.19	96.5	1.042
					800	4.76	34.41	0.41	3.52	27.26	90.9	1.136
					1000	(4.01)	(34.46)			(27.38)	(79.9)	(1.308)

113.35 CREST; November 20, 1950; 1417 GCT; 29°11.5'N, 115°41.5'W; sounding, 850 fm; wind, 300°, force 5; weather, partly cloudy; sea, very rough; wire angle, 43°.

0	15.99	33.45	5.17	0.71	0	15.99	33.45	5.17	0.71	24.58	336.8	0.000
8	15.98	33.45	5.54	0.66	10	15.97	33.45	5.53	0.66	24.58	336.6	0.034
19	15.86	33.51	5.53	0.66	20	15.85	33.51	5.52	0.66	24.66	330.0	0.067
41	13.61	33.31	5.88	0.74	30	15.05	33.46	5.75	0.69	24.80	317.0	0.099
60	12.21	33.47	5.14	1.15	50	12.89	33.26	5.66	0.80	25.09	289.5	0.160
80	10.52	33.58	3.90	1.93	75	10.85	33.55	4.25	1.79	25.69	232.3	0.225
105p	9.33	34.00	2.59	2.33	100	9.51	33.93	2.78	2.27	26.22	182.8	0.277
219p	9.38	34.27	1.23	2.82	150	9.25	34.13	1.88	2.57	26.42	164.9	0.364
282p	8.72	34.33	0.74	3.06	200	9.18	34.23	1.37	2.76	26.47	160.7	0.445
383p	7.42	34.29	0.65	3.17	250	9.18	34.31	0.97	2.95	26.57	152.4	0.524
554p	6.13	34.36	0.30	3.34	300	8.40	34.32	0.69	3.09	26.70	140.6	0.597
725p	5.04	34.42	0.35	3.38	400	7.25	34.29	0.64	3.19	26.85	127.6	0.731
909p	4.24	34.34a)	0.49a)	3.08r	500	6.48	34.33	0.45	3.29	26.98	115.5	0.852
					600	5.83	34.38	0.28	3.35	27.11	104.5	0.962
					700	5.19	34.41	0.35	3.38	27.21	95.2	1.062
					800	4.64	34.40	0.39		27.26	90.2	1.155
					1000	(4.00)	(34.37)			(27.31)	(86.5)	(1.331)

117.35 CREST; November 20, 1950; 0818 GCT; 28°38'N, 115°16'W; sounding, 125 fm; wind, 320°, force 6; weather, partly cloudy; sea, very rough; wire angle, 20°.

9	17.01	33.61	5.22	0.54	0	(17.01)	(33.62)	(4.84)	(0.54)	(24.47)	(346.8)	(0.000)
18	17.00	33.54	5.54	0.53	10	17.01	33.60	5.22	0.54	24.46	348.5	0.035
28	16.94	33.62	5.18	0.51	20	17.00	33.54	5.54	0.53	24.42	353.0	0.070
41	11.65	33.51	4.59	1.29	30	16.95	33.62	5.00	0.51	24.49	346.3	0.105
56	11.32	33.61	4.41	1.49	50	11.39	33.55	4.46	1.46	25.60	241.0	0.164
68	11.21	33.69	3.67	1.70	75	11.19	33.70	3.40	1.81	25.72	227.0	0.222
81	11.21	33.71	3.26	1.72r	100	11.62	34.04	1.76	2.26	25.93	210.1	0.277
90	11.43	33.89	2.56	2.11								
95	11.61	34.02	1.80	2.26								
105	11.53	34.05	1.74	2.27								

120.35 CREST; November 9, 1950; 0538 GCT; 28°04.5'N, 114°55.5'W; sounding, 47 fm; wind, calm; weather, partly cloudy; sea, slight; wire angle, 3°.

0	19.07	33.82	5.33	0.42	0	19.07	33.82	5.33	0.42	24.12	380.2	0.000
10	18.98	33.73	5.29	0.43	10	18.98	33.73	5.29	0.43	24.07	385.4	0.038
20	18.91	33.71	5.23	0.38	20	18.91	33.71	5.23	0.38	24.09	384.3	0.077
30	17.09	33.66	5.31	0.41	30	17.97	33.66	5.31	0.41	24.27	366.7	0.114
40	17.09	33.69	4.49	0.72	50	13.86	33.69	3.71	1.29	25.22	276.6	0.179
50	13.86	33.69	3.71	1.29								
59	12.60	33.73	3.68	1.49								
69	12.06	33.80	2.61	1.86								

a) Values doubtful; Nansen bottle may have malfunctioned.

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

120.45

CREST; November 11, 1950; 1148 GCT; 27°43'N, 115°33'W; sounding, 1,260 fm; wind, 360°, force 4; weather, clear; sea, moderate, wire angle, 0°.

0	19.65	33.73	4.52	0.48	0	19.65	33.73	4.52	0.48	23.91	400.9	0.000
10	19.64	33.69	3.55r	0.63	10	19.64	33.69	4.42	0.63	23.88	404.2	0.040
25	18.14	33.71	4.15	1.07	20	19.63	33.71	4.26	0.91	23.90	402.6	0.081
50	14.46	33.63	3.41	1.32	30	17.27	33.69	4.05	1.25	24.47	348.5	0.118
74	12.05	33.58	3.55	1.96	50	14.46	33.63	3.41	1.32	25.05	293.0	0.182
99	11.84	33.86	2.37	1.23	75	12.04	33.58	3.53	1.99	25.50	251.3	0.250
133	9.66	33.96	2.26	2.48	100	11.83	33.86	2.37	2.24	25.75	227.5	0.310
201	8.84	34.13	1.81	2.83	150	9.34	34.01	2.17	2.59	26.31	175.2	0.411
295	8.05	34.24	0.88	3.03	200	8.86	34.13	1.81	2.83	26.48	159.8	0.494
398	7.81	34.43	0.91	3.15	250	8.36	34.18	1.34	2.94	26.60	149.4	0.571
496	6.71	34.38	0.24	3.30	300	8.03	34.25	0.86	3.04	26.70	140.2	0.644
598	5.93	34.41	0.18	3.27	400	7.78	34.43	0.90	3.15	26.88	124.9	0.777
797	4.80	34.42	0.27	3.34	500	6.67	34.38	0.23	3.30	27.00	114.4	0.897
992	4.08	34.49	0.44	3.29	600	5.91	34.41	0.19	3.27	27.12	103.6	1.006
1197	3.54	34.52	0.59	3.33	700	5.33	34.41	0.22	3.31	27.19	97.0	1.106
					800	4.79	34.42	0.27	3.34	27.26	90.5	1.200
					1000	4.06	34.49	0.46	3.29	27.40	78.3	1.368

120.50

CREST; November 11, 1950; 1426 GCT; 27°33.5'N, 115°52'W; sounding, 2,040 fm; wind, 360°, force 3; weather, clear; sea, moderate; wire angle, 11°.

0	19.03	33.70	5.15	0.57	0	19.03	33.70	5.15	0.57	24.04	388.0	0.000
10	19.22	33.72	5.12	0.60	10	19.22	33.72	5.12	0.60	24.01	391.5	0.039
25	18.67	33.73	5.23	0.54	20	18.94	33.73	5.17	0.55	24.09	384.3	0.078
49	15.47	33.41	3.43	0.67	30	17.87	33.71	5.27	0.54	24.34	360.8	0.111
74	13.28	33.70	3.94	1.48	50	15.45	33.41	5.43	0.67	24.67	329.6	0.184
98	11.13	33.76	3.24	1.86	75	13.05	33.70	3.90	1.47	25.40	260.8	0.258
154	9.39	33.98	1.97r	2.13	100	10.95	33.76	3.20	1.91	25.84	219.0	0.318
200	8.88	34.14	2.65	2.59	150	9.47	33.96	2.86	2.12	26.25	180.9	0.418
295	8.17	34.31	0.80	3.00	200	8.88	34.14	2.65	2.59	26.48	159.4	0.503
395	7.61	34.40	1.23r	-	250	8.48	34.25	1.87	2.86	26.63	146.1	0.579
483	6.87	34.40	0.29	3.19	300	8.14	34.32	0.75	3.00	26.74	136.7	0.650
586	5.91	34.39	0.30	3.35	400	7.58	34.40	0.40	3.14	26.89	124.2	0.780
773	4.93	34.43	0.32	3.40	500	6.72	34.40	0.28	3.21	27.01	113.6	0.899
975	4.16	34.43	0.50	3.39	600	5.82	34.39	0.30	3.36	27.12	103.6	1.008
1190	3.55	34.50	0.76	3.34	700	5.24	34.43	0.32	3.39	27.22	94.4	1.107
					800	4.82	34.43	0.33	3.40	27.27	90.2	1.199
					1000	4.08	34.44	0.54	3.39	27.35	82.3	1.371

120.60

CREST; November 11, 1950; 2054, missing GCT; 27°14'N, 116°34.5'W; sounding, 2,050 fm; wind, 360°, force 3; weather, clear; sea, moderate; wire angle, 19°, 30°.

0	19.54	33.53	5.14	0.48	0	19.54	33.53	5.14	0.48	23.78	412.7	0.000
10	19.39	33.49	5.19	0.52	10	19.39	33.49	5.19	0.52	23.79	412.3	0.041
24	19.33	33.53	5.00	0.65	20	19.35	33.53	5.01	0.65	23.83	408.8	0.082
47	15.82	33.31	5.75	0.64	30	19.32	33.52	5.08	0.64	23.83	409.1	0.123
70	12.93	33.36	5.51	0.74	50	15.25	33.31	5.75	0.65	24.64	332.7	0.197
93	11.90	33.46	4.36	1.08	75	12.65	33.38	5.20	0.78	25.23	276.8	0.274
141	9.94	33.73	3.12	1.95	100	11.50	33.49	4.12	1.26	25.53	248.5	0.339
184	9.49	34.07	2.29	2.38	150	9.82	33.82	2.90	2.06	26.08	196.8	0.450
267	8.92	34.31	1.40	2.69	200	9.38	34.15	2.10	2.45	26.41	166.4	0.541
					250	9.05	34.29	1.56	2.63	26.57	151.9	0.621
342	8.04	-	0.75	2.85	300	8.60	34.32	1.11	2.77	26.67	143.6	0.695
425	7.10	34.34	0.45	2.99	400	7.37	34.34	0.52	2.95	26.87	125.7	0.829
512	6.42	34.34	0.27	3.06	500	6.50	34.34	0.29	3.05	26.99	115.0	0.949
691	5.36	34.41	0.33	3.20	600	5.87	34.37	0.31	3.14	27.09	105.7	1.061
876	4.45	34.45	0.41	3.22	700	5.32	34.41	0.35	3.20	27.19	96.9	1.161
1076	3.84	34.49	0.61	3.24	800	4.81	34.43	0.37	3.21	27.27	90.0	1.255
					1000	4.04	34.47	0.52	3.23	27.38	79.6	1.425

SIO

CCOFI 5011

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

120.70 CREST; November 12, 1950; 0227, 0246 GCT; 26°51'N, 117°14.5'W; sounding, 2,030 fm; wind, 020°, force 3; weather, clear; sea, moderate; wire angle, 7°, 10°.

0	20.33	33.61	4.31	0.51	0	20.33	33.61	4.31	0.51	23.64	426.6	0.000
10	20.32	33.60	4.10	0.52	10	20.32	33.60	4.10	0.52	23.63	427.4	0.043
24	20.33	33.62	4.15	0.54	20	20.33	33.61	4.14	0.53	23.64	427.3	0.085
49	18.44	33.51	4.31	0.47	30	20.33	33.62	4.18	0.53	23.64	426.9	0.128
74	16.36	33.54	4.79	0.49	50	18.20	33.51	4.33	0.47	24.10	383.7	0.209
98	14.44	33.67	4.63	0.56	75	16.20	33.54	4.78	0.49	24.60	336.9	0.299
151	11.41	33.87	3.02	1.59	100	14.17	33.67	4.60	0.57	25.14	285.6	0.377
199	10.74	34.36	1.31	2.57	150	11.43	33.86	3.05	1.55	25.83	221.1	0.504
293	9.53	34.51	0.58	2.91	200	10.72	34.36	1.29	2.58	26.35	173.1	0.603
397	8.22	-	0.54	3.02	250	10.11	34.48	0.86	2.81	26.55	155.0	0.684
					300	9.42	34.51	0.57	2.92	26.69	142.5	0.758
499	6.55	34.33	0.62	3.09	400	8.17	34.41	0.55	3.02	26.81	132.2	0.896
596	-	34.45	0.26	3.28	500	6.53	34.33	0.62	3.09	26.98	116.2	1.020
793	4.80	34.45	0.43	3.30	600	5.83	34.45	0.25	3.28	27.16	99.3	1.128
984	4.15	34.52	0.50	3.30	700	5.24	34.45	0.35	3.32	27.23	92.9	1.224
1195	3.59	34.67	0.68	3.37	800	4.77	34.45	0.45	3.30	27.29	88.1	1.314
					1000	4.11	34.53	0.52	3.31	27.42	76.0	1.478

120.80 CREST; November 12, 1950; 0758 GCT; 26°30'N, 117°56.5'W; sounding, 1,950 fm; wind, 020°, force 2; weather, clear; sea, moderate; wire angle, 2°.

0	20.38	33.80	4.67	0.47	0	20.38	33.80	4.67	0.47	23.77	414.1	0.000
10	20.41	33.82	5.11	0.48	10	20.41	33.82	5.11	0.48	23.78	413.7	0.041
25	20.43	33.84	4.31	0.49	20	20.44	33.84	4.50	0.49	23.78	413.4	0.083
49	18.40	33.69	5.29	0.53	30	20.44	33.84	4.35	0.50	23.78	413.7	0.124
74	15.42	33.57	5.21	0.55	50	18.05	33.68	5.29	0.53	24.27	367.8	0.202
98	13.31	33.69	5.46	0.70	75	15.30	33.57	5.22	0.55	24.82	315.5	0.288
151	10.66	33.90	3.20	1.96	100	13.22	33.69	5.45	0.74	25.35	265.5	0.360
200	10.79	34.43	1.12	2.54	150	10.66	33.90	3.25	1.95	26.00	204.9	0.477
297	10.18	34.61	0.62	2.93	200	10.79	34.43	1.12	2.54	26.39	169.2	0.572
403	8.43	34.40	0.71	3.03	250	10.51	34.57	0.69	2.81	26.55	155.2	0.652
501	7.75	34.54	0.35	3.16	300	10.15	34.61	0.60	2.94	26.64	147.2	0.728
602	6.63	34.56	0.20	3.16	400	8.47	34.40	0.71	3.03	26.75	137.6	0.870
800	5.16	34.56	0.31	3.20	500	7.77	34.54	0.36	3.16	26.97	118.1	0.998
995	4.26	34.56	0.43	3.19	600	6.67	34.56	0.20	3.16	27.14	102.6	1.108
1200	3.74	34.65	0.75	3.16	700	5.85	34.56	0.25	3.17	27.25	92.7	1.206
					800	5.16	34.56	0.31	3.20	27.33	84.9	1.295
					1000	4.24	34.56	0.43	3.19	27.43	75.4	1.455

120.90 CREST; November 12, 1950; 1339 GCT; 26°09'N, 118°37.5'W; sounding, 2,230 fm; wind, 360°, force 2; weather, clear; sea, moderate; wire angle, 11°.

0	20.29	33.77	4.95	0.54	0	20.29	33.77	4.95	0.54	23.77	414.2	0.000
9	20.29	33.84	5.08	0.49	10	20.30	33.84	5.08	0.49	23.82	409.5	0.041
24	20.32	33.81	4.91	0.48	20	20.32	33.82	4.92	0.48	23.80	412.0	0.082
49	16.82	-	5.85	0.51	30	20.30	33.77	5.00	0.49	23.77	415.3	0.124
73	-	33.61	5.38	0.60	50	16.75	33.66	5.85	0.51	24.57	339.6	0.199
97	12.66	33.73	4.79	1.02	75	13.90	33.61	5.35	0.61	25.15	284.0	0.277
149	10.66	34.11	2.29	2.40	100	12.55	33.75	4.70	1.15	25.53	248.4	0.344
196	11.05	34.48	0.62	2.76	150	10.67	34.12	2.25	2.42	26.17	188.8	0.452
291	10.50	34.61	0.31	3.18	200	11.05	34.50	0.57	2.79	26.40	168.5	0.542
396	9.22	34.61	0.33	-	250	10.80	34.58	0.36	3.05	26.50	159.4	0.624
490	7.92	34.58	0.29	3.22	300	10.42	34.61	0.32	3.19	26.59	151.8	0.701
591	6.63	34.54	0.32	3.34	400	9.15	34.61	0.33	3.24	26.81	132.8	0.844
791	5.32	34.58	0.31	3.43	500	7.78	34.57	0.30	3.25	26.99	116.3	0.968
983	4.44	34.63	0.43	3.44	600	6.54	34.54	0.32	3.35	27.14	102.2	1.078
1190	3.75	34.63	0.69	3.38	700	5.85	34.55	0.32	3.41	27.24	93.5	1.175
					800	5.26	34.58	0.34	3.43	27.33	84.7	1.264
					1000	4.37	34.63	0.45	3.43	27.47	71.8	1.422

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

CREST; November 12, 1950; 1747 GCT; 25°56'N, 119°08'W; sounding, 2,200 fm; wind, 020°, force 3; weather, partly cloudy; sea, moderate; wire angle, 13°. 120.100

0	20.36	33.80	4.70	0.47	0	20.36	33.80	4.70	0.47	23.77	413.6	0.000
10	20.32	33.77	4.89	0.50	10	20.32	33.77	4.89	0.50	23.76	415.1	0.041
24	20.34	33.78	4.90	0.47	20	20.34	33.77	4.89	0.48	23.76	415.9	0.083
49	17.11	33.66	5.61	0.47	30	20.34	33.77	5.02	0.47	23.76	416.3	0.125
73	14.94	33.64	5.62	0.56	50	16.99	33.66	5.60	0.47	24.51	344.9	0.201
97	13.69	33.69	5.23	0.70	75	14.80	33.64	5.60	0.57	24.99	299.9	0.281
149	10.93	33.95	3.11	1.87	100	13.57	33.70	5.18	0.77	25.29	271.5	0.353
196	11.00	34.33	1.16	2.64	150	10.93	33.97	3.08	1.91	26.01	204.3	0.471
286	9.54	34.45	0.54	2.93	200	10.95	34.34	1.12	2.65	26.29	178.6	0.568
388	8.32	34.47	0.35	3.10	250	10.11	34.42	0.70	2.85	26.50	159.5	0.652
480	6.93	34.36	0.40	3.11	300	9.35	34.46	0.51	2.96	26.66	145.1	0.728
583	6.04	34.45	0.28	3.19	400	8.16	34.46	0.35	3.11	26.85	128.4	0.864
772	5.08	34.54	0.30	3.30	500	6.69	34.37	0.40	3.11	26.99	115.4	0.986
967	4.20	34.47	0.53	3.52	600	5.93	34.46	0.28	3.21	27.16	99.9	1.094
1173	3.66	34.52	0.66	3.44	700	5.39	34.51	0.30	3.25	27.26	90.4	1.189
					800	4.96	34.54	0.32	3.34	27.34	83.8	1.276
					1000	4.09	34.47	0.58	3.52	27.38	80.2	1.441

CREST; November 12, 1950; 2300 GCT; 25°33'N, 119°44'W; sounding, 2,280 fm; wind, 020°, force 3; weather, cloudy; sea, moderate; wire angle, 11°. 120.110

0	20.57	33.80	5.40	0.56	0	20.57	33.80	5.40	0.56	23.72	418.9	0.000
10	20.46	33.71	5.19	0.55	10	20.46	33.71	5.19	0.55	23.68	423.0	0.042
25	20.50	33.78	4.86	0.52	20	20.49	33.74	4.89	0.53	23.69	421.9	0.084
49	18.44	33.86	5.02	0.49	30	20.50	33.80	4.87	0.51	23.74	418.1	0.126
73	16.68	33.82	4.17	0.53	50	18.40	33.86	5.02	0.49	24.32	362.9	0.204
97	15.04	33.87	4.45	0.63	75	16.55	33.82	4.19	0.54	24.73	324.2	0.290
150	10.99	33.82	3.39	1.27	100	14.66	33.87	4.41	0.66	25.19	280.9	0.366
197	10.01	34.07	2.61	2.36	150	10.99	33.82	3.39	1.27	25.88	216.6	0.490
291	8.66	34.34	1.30	2.98	200	9.94	34.08	2.56	2.41	26.26	180.6	0.590
388	7.74	34.42	0.63	3.25	250	9.19	34.24	1.81	2.84	26.51	157.8	0.674
483	6.84	34.33	0.26	3.44	300	8.57	34.35	1.23	3.00	26.70	140.9	0.749
583	6.02	34.42	0.19	3.53	400	7.64	34.41	0.58	3.28	26.88	124.4	0.881
777	4.99	34.61	0.33	3.57	500	6.68	34.34	0.23	3.44	26.96	117.5	1.002
973	4.31	34.60	0.44	3.57	600	5.91	34.44	0.22	3.43	27.14	101.1	1.112
1179	3.67	34.56	0.66	3.56	700	5.36	34.57	0.27	3.49	27.31	85.5	1.205
					800	4.87	34.61	0.35	3.57	27.40	77.5	1.286
					1000	4.22	34.60	0.47	3.57	27.47	72.2	1.436

CREST; November 11, 1950; 0628 GCT; 27°19.5'N, 114°53.5'W; sounding, 230 fm; wind, 320°, force 4; weather, clear; sea, moderate; wire angle, 23°. 123.40

0	19.78	33.69	4.83	0.47	0	19.78	33.69	4.83	0.47	23.84	407.3	0.000
9	19.79	33.69	4.63	0.49	10	19.79	33.69	4.63	0.49	23.84	407.6	0.041
23	19.80	33.73	4.70	0.47	20	19.80	33.72	4.66	0.47	23.86	406.0	0.081
68	13.01	33.37	4.94	0.71	30	19.80	33.73	4.74	0.47	23.87	405.7	0.122
91	12.12	33.53	4.35	1.28	50	19.76	33.58	4.88	0.55	23.76	416.4	0.204
139	10.65	34.02	2.10	2.21	75	12.64	33.37	4.89	0.83	25.22	277.7	0.291
182	10.60	34.40	1.09	2.57	100	11.77	33.61	3.98	1.58	25.57	244.6	0.356
227	10.04	-	0.78	2.81	150	10.62	34.13	1.75	2.32	26.19	187.2	0.464
272	9.50	34.41	0.77	2.79	200	10.44	34.41	0.89	2.70	26.44	164.7	0.553
326	8.72	-	-	-	250	9.74	34.41	0.78	2.80	26.56	154.1	0.632
340	8.52	34.34	0.42	2.95	300	9.09	34.39	0.66	2.83	26.65	145.3	0.708

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ_T	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
123.50	CREST; November 11, 1950; 0052 GCT; 26°59.5'N, 115°30'W; sounding, 1,800 fm; wind, 360°, force 3; weather, low fog; sea, moderate; wire angle, 13°.											
0	19.95	33.80	4.81	0.60	0	19.95	33.80	4.81	0.60	23.89	402.8	0.000
10	19.96	33.87	4.61	0.63	10	19.96	33.87	4.61	0.63	23.93	398.8	0.040
24	-	33.76	4.59	0.61	20	(19.86)	33.80	4.59	0.63	(23.90)	(401.7)	(0.080)
53	14.00	33.55	4.37	1.02	30	(19.68)	33.73	4.59	0.62	(23.90)	(402.7)	(0.120)
77	11.71	33.69	3.72	1.50	50	(15.25)	33.55	4.42	0.94	(24.82)	(315.2)	(0.192)
105	10.46	33.80	3.07	1.89	75	11.86	33.68	3.75	1.46	25.61	240.3	(0.261)
147p	9.30	34.42	1.01	2.92	100	10.65	33.76	3.17	1.83	25.89	213.9	(0.318)
356p	8.43	-	0.33	3.22	150	(9.25)	(34.43)	0.95	2.93	(26.65)	(142.7)	(0.407)
482p	7.01	34.58	0.27	3.25	200	(8.96)	(34.51)	0.61	3.04	(26.76)	(133.2)	(0.476)
561p	6.01	34.45	0.22	3.22	250	(8.78)	(34.54)	0.47	3.12	(26.81)	(129.2)	(0.542)
787p	5.04	34.63	0.28	3.22	300	(8.61)	(34.57)	0.40	3.18	(26.86)	(125.3)	(0.605)
1033p	3.90	34.65	0.62	3.20	400	8.10	(34.59)	0.31	3.24	(26.96)	(117.9)	(0.727)
1251p	3.32	34.69	0.78	3.05	500	6.73	34.55	0.25	3.24	27.12	102.7	(0.837)
					600	5.78	34.47	0.22	3.21	27.18	97.2	(0.937)
					700	5.36	34.56	0.23	3.22	27.31	86.2	(1.028)
					800	4.99	34.63	0.31	3.22	27.40	77.5	(1.111)
					1000	4.07	34.65	0.57	3.21	27.52	66.6	(1.255)
123.60	CREST; November 10, 1950; 1910 GCT; 26°37'N, 116°09'W; sounding, 2,050 fm; wind, 340°, force 4; weather, cloudy; sea, moderate; wire angle, 15°.											
0	20.00	33.75	4.83	0.41	0	20.00	33.75	4.83	0.41	23.83	408.2	0.000
10	19.92	33.78	4.62	0.42	10	19.92	33.78	4.62	0.42	23.87	404.3	0.041
24	-	33.87	4.66	0.46	20	19.92	33.87	4.64	0.44	23.94	398.1	0.081
48	14.94	33.62	4.99	0.46	30	19.91	33.85	4.73	0.46	23.93	399.7	0.121
71	12.63	33.69	3.70	0.73	50	14.60	33.62	4.99	0.47	25.02	296.6	0.190
129	11.11	33.73	3.36	1.23	75	12.46	33.69	3.66	0.77	25.50	250.5	0.259
146	9.62	34.01	2.68	1.54	100	11.90	33.70	3.50	1.02	25.62	240.1	0.320
192	9.46	34.16	1.73	1.89	150	9.55	34.02	2.55	1.56	26.28	177.7	0.425
284	8.91	34.60r	0.57	2.97	200	9.42	(34.18)	1.57	1.94	(26.43)	(164.9)	(0.510)
380	7.36	34.36	0.60	2.89	250	9.19	(34.28)	0.75	2.26	(26.54)	(154.8)	(0.590)
472	6.91	34.35	0.42	2.97	300	8.60	(34.34)	0.56	2.59	(26.68)	(142.1)	(0.664)
571	5.84	34.45	0.30	3.30	400	7.29	34.36	0.58	2.90	26.90	123.0	(0.797)
753	4.83	34.46	0.36	3.30	500	6.53	34.37	0.39	3.04	27.01	113.2	(0.915)
955	3.99	34.60	0.53	3.33	600	5.65	34.45	0.30	3.30	27.18	96.9	(1.020)
1157	3.50	34.60	0.72	3.37	700	5.08	34.46	0.33	3.30	27.26	90.1	(1.114)
					800	4.62	34.48	0.39	3.30	27.33	84.1	(1.201)
					1000	3.84	34.60	0.60	3.34	27.50	68.0	(1.352)
123.70	CREST; November 10, 1950; 1344 GCT; 26°18.5'N, 116°47'W; sounding, 2,080 fm; wind, 340°, force 3; weather, cloudy; sea, moderate; wire angle, 15°.											
0	19.65	33.71	4.55	0.33	0	19.65	33.71	4.55	0.33	23.89	402.6	0.000
10	19.68	33.73	4.96	0.28	10	19.68	33.73	4.96	0.28	23.90	402.3	0.040
24	19.67	33.75	4.91	0.29	20	19.69	33.75	4.92	0.28	23.91	401.1	0.080
47	16.94	33.60	5.45	0.43	30	19.60	33.75	5.01	0.31	23.93	399.3	0.120
69	15.28	33.44	6.25	0.50	50	16.45	33.57	5.56	0.44	24.57	339.5	0.194
90	13.52	33.48	5.42	0.67	75	14.95	33.44	6.20	0.54	24.80	317.7	0.276
138	10.73	33.78	4.44	1.34	100	12.57	33.51	5.10	0.78	25.34	266.4	0.349
181	9.77	34.13	2.46	2.16	150	10.42	33.97	4.00	1.71	26.10	195.6	0.465
268	8.77	34.31	1.12	2.67	200	9.51	34.77	2.04	2.32	26.41	167.0	0.556
359	7.44	34.52	0.85	2.93	250	8.94	34.27	1.25	2.60	26.58	151.6	0.635
445	7.13	34.51	0.43	3.16	300	8.28	34.39	0.99	2.77	26.77	133.6	0.707
538	6.21	34.42	0.30	3.20	400	7.24	34.52	0.63	3.05	27.03	110.5	0.828
724	4.48	-	0.53r	-	500	6.65	34.45	0.33	3.19	27.05	108.9	0.939
907	4.24	34.65	0.37	3.27a)	600	5.72	(34.44)	(0.30)	3.22	(27.17)	(98.6)	(1.042)
1107	3.68	34.70	0.70	2.95	700	5.12	(34.52)	(0.30)	3.25	(27.30)	(86.2)	(1.135)
					800	4.64	(34.59)	(0.31)	3.27	(27.41)	(76.1)	(1.216)
					1000	3.95	34.68	0.47	3.15	27.56	63.0	(1.354)

a) Mean value of 3.18 and 3.36 μg at/L.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

CREST; November 9, 1950; 1538 GCT; 26°40'N, 114°27'W; sounding, 1,590 fm; wind, 320°, force 3; weather, cloudy; sea, moderate; wire angle, 10°. 127.40

0	19.98	33.73	4.94	0.34	0	19.98	33.73	4.94	0.34	23.81	409.9	0.000
10	19.99	33.73	5.05	0.40	10	19.99	33.73	5.05	0.40	23.81	410.0	0.041
22	19.54	33.80	5.10	0.43	20	19.68	33.78	5.09	0.43	23.94	398.7	0.081
49	14.72	33.48	4.77	0.42	30	18.50	33.80	5.08	0.43	24.25	369.0	0.120
73	13.54	33.80	3.84	0.79	50	14.65	33.48	4.68	0.42	24.90	307.9	0.187
97	11.78	33.80	-	1.39	75	13.47	33.80	3.80	0.84	25.39	261.6	0.259
148	11.52	34.40	-	2.48	100	11.74	33.80	(3.31)	1.50	25.73	229.9	0.320
194	10.65	34.40	-	2.71	150	11.49	34.40	(2.67)	2.50	26.24	182.5	0.424
289	9.29	34.43	1.25	2.91	200	10.50	34.40	(2.15)	2.72	26.42	166.4	0.510
387	8.34	-	0.96	3.02	250	9.75	34.42	(1.64)	2.84	26.56	153.5	0.590
481	7.11	34.49	0.48	3.13	300	9.17	34.43	1.18	2.92	26.66	144.4	0.665
580	6.18	34.57	0.36	3.15	400	8.19	34.44	0.89	3.04	26.83	130.3	0.802
800	4.86	34.46	0.43	3.31	500	6.88	34.51	0.44	3.14	27.07	107.7	0.921
1010	4.20	34.63	0.54	3.37	600	6.04	34.57	0.35	3.15	27.23	93.2	1.022
1210	3.62	34.63	0.74	3.38	700	5.42	34.51	0.38	3.20	27.26	90.8	1.114
					800	4.86	34.46	0.43	3.31	27.29	88.5	1.203
					1000	4.22	34.63	0.55	3.37	27.49	70.0	1.361

CREST; November 9, 1950; 2112 GCT; 26°21'N, 115°07'W; sounding, 1,860 fm; wind, 320°, force 4; weather, cloudy; sea, moderate; wire angle, 9°. 127.50

0	20.05	33.57	5.18	0.41	0	20.05	33.57	5.18	0.41	23.68	422.5	0.000
10	19.86	33.58	4.70	0.35	10	19.86	33.58	4.70	0.35	23.74	417.3	0.042
25	19.83	33.66	4.95	0.34	20	19.85	33.66	4.83	0.34	23.80	411.6	0.083
49	16.06	33.37	5.62	0.35	30	19.84	33.65	5.23	0.34	23.80	412.4	0.125
74	14.06	33.28	5.60	0.40	50	16.00	33.36	5.64	0.35	24.51	345.0	0.200
98	12.69	33.49	5.23	0.76	75	13.92	33.28	5.59	0.40	24.90	308.5	0.282
150	10.12	33.86	3.84	1.45	100	12.31	33.49	5.20	0.78	25.38	263.0	0.353
198	9.65	34.20	2.13	1.91	150	10.12	33.86	3.84	1.45	26.06	198.6	0.469
293	8.50	34.31	0.98	2.54	200	9.62	34.20	2.09	1.93	26.41	166.6	0.560
392	7.44	34.38	0.66	2.82	250	9.06	34.31	1.35	2.29	26.59	150.5	0.639
486	6.91	34.49	0.22	2.96	300	8.39	34.31	0.94	2.57	26.69	141.2	0.713
586	5.92	34.54	0.23	3.05	400	7.37	34.39	0.62	2.83	26.91	122.0	0.843
781	4.86	34.56	0.36	3.08u	500	6.81	34.50	0.22	2.98	27.07	107.5	0.958
976	4.11	34.65	0.53	3.26a)	600	5.79	34.54	0.24	(3.06)	27.24	92.1	1.059
1177	3.59	34.65	0.75	3.49r	700	5.24	34.56	0.28	(3.12)	27.32	84.7	1.147
					800	4.77	34.56	0.38	(3.16)	27.37	79.9	1.229
					1000	4.04	34.65	0.56	(3.26)	27.53	66.3	1.375

CREST; November 10, 1950; 0248 GCT; 26°03.5'N, 115°46.5'W; sounding, 2,060 fm; wind, 040°, force 2; weather, clear; sea, moderate; wire angle, 20°. 127.60

0	19.69	33.71	4.61	0.42	0	19.69	33.71	4.61	0.42	23.88	403.4	0.000
9	19.72	33.71	4.52	0.38	10	19.71	33.71	4.52	0.38	23.88	404.2	0.040
23	19.67	33.56	5.00	0.35	20	19.69	33.59	4.86	0.36	23.79	412.8	0.081
46	17.84	33.46	5.65	0.36	30	19.55	33.54	5.34	0.34	23.79	413.3	0.123
70	14.45	33.22	5.69	0.43	50	17.35	33.44	5.68	0.37	24.26	369.1	0.201
94	12.50	-	5.39	0.62	75	13.92	33.22	5.68	0.46	24.85	312.9	0.286
144	10.04	33.80	3.53	1.67	100	12.20	33.31	5.20	0.72	25.26	274.3	0.359
187	9.66	34.07	2.30	2.29	150	9.95	33.83	3.32	1.76	26.07	198.2	0.477
277	8.88	34.42	0.94	2.76	200	9.56	34.13	2.02	2.31	26.37	170.8	0.570
370	7.70	34.31	0.75	2.86	250	9.14	34.35	1.24	2.66	26.61	148.9	0.650
458	6.79	34.47	0.41	2.99	300	8.61	34.41	0.84	2.79	26.74	137.1	0.721
553	6.15	34.47	0.31	3.19	400	7.34	34.37	0.66	2.89	26.90	123.0	0.851
745	4.98	-	-	-	500	6.49	34.47	0.34	3.08	27.09	105.3	0.965
936	4.26	34.63	0.46	3.46	600	5.83	(34.48)	(0.31)	(3.24)	(27.18)	(97.1)	(1.066)
1134	3.61	34.51	0.67	3.51	700	5.23	(34.51)	(0.32)	(3.32)	(27.28)	(88.3)	(1.158)
					800	4.74	(34.57)	(0.36)	(3.39)	(27.39)	(78.8)	(1.243)
					1000	4.06	34.62	0.51	3.48	27.50	68.7	(1.390)

a) Alternate value, 3.02 μg at/L, not used in interpolation.

S10

CCOFI 5011

	OBSERVED					INTERPOLATED					COMPUTED		
	Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg at/L	Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg at/L	σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m
127.70	CREST; November 10, 1950; 0819 GCT; 25°44'N, 116°25'W; sounding, 2,120 fm; wind, 320°, force 2; weather, overcast; sea, moderate; wire angle, 6°.												
	0	19.92	33.73	3.97	0.33	0	19.92	33.73	3.97	0.33	23.84	407.4	0.000
	10	19.91	33.78	3.72	0.33	10	19.91	33.78	3.72	0.33	23.88	404.1	0.041
	25	19.91	33.69	3.93	0.39	20	19.92	33.74	3.80	0.37	23.84	407.6	0.081
	49	16.12	33.46	4.41	0.39	30	19.86	33.64	4.00	0.39	23.78	413.7	0.122
	74	15.00	33.40	5.51	0.59	50	16.12	33.46	4.47	0.39	24.56	340.3	0.198
	98	12.28	33.51	4.71	0.73	75	14.84	33.40	5.50	0.59	24.79	318.3	0.280
	151	11.26	34.04	1.77	2.06	100	12.19	33.52	4.48	0.74	25.42	258.6	0.352
	199	10.26	34.31	0.83	2.39	150	11.28	34.03	1.78	2.02	25.99	206.0	0.468
	294	9.37	34.54	0.42	2.71	200	10.23	34.31	0.83	2.40	26.39	168.5	0.562
	395	8.29	-	0.22	2.82	250	9.69	34.49	0.59	2.58	26.63	147.4	0.641
	491	6.49	34.33	0.38u	2.92	300	9.32	34.53	0.40	2.72	26.72	139.4	0.713
	592	5.93	34.42	0.27	2.96	400	8.22	34.40	0.21	2.82	26.79	133.7	0.849
	789	4.88	34.51	0.28	2.99	500	6.41	34.33	0.24	2.92	26.99	114.6	0.973
	984	4.11	34.46	0.42	3.19	600	5.89	34.43	0.28	2.96	27.14	101.6	1.081
	1188	3.55	34.51	0.68	3.21	700	5.39	34.50	0.28	2.96	27.25	91.1	1.177
						800	4.84	34.50	0.30	3.00	27.32	85.3	1.265
						1000	4.05	34.46	0.43	3.19	27.37	80.4	1.432
130.35	CREST; November 15, 1950; 0712 GCT; 26°19.5'N, 113°49'W; sounding, 450 fm; wind, 320°, force 4; weather, clear; sea, moderate; wire angle, 5°.												
	0	21.10	34.27	4.43	0.80	0	21.10	34.27	4.43	0.80	23.93	398.4	0.000
	10	21.10	34.27	4.71	0.78	10	21.10	34.27	4.71	0.78	23.93	398.8	0.040
	25	19.29	34.09	4.03	0.90	20	20.55	34.19	4.28	0.84	24.02	390.8	0.079
	50	14.43	34.93	3.21	1.72	30	18.25	34.03	3.85	1.01	24.49	346.4	0.116
	74	12.91	34.02	2.30	2.20	50	14.43	33.93	3.21	1.72	25.29	270.7	0.178
	99	12.18	34.23	1.44	2.61	75	12.70	34.02	2.22	2.21	25.71	230.7	0.241
	152	11.63	34.45	0.77	2.92	100	12.18	34.23	1.40	2.62	25.98	206.3	0.295
	190p	11.03	34.56	0.70	2.92	150	11.70	34.44	0.78	2.91	26.23	183.3	0.393
	241p	9.96	34.54	0.56	2.94	200	10.86	34.56	0.67	2.92	26.48	160.8	0.478
	290p	9.56	34.52	0.55	2.94	250	9.89	34.54	0.55	2.94	26.63	147.0	0.556
	327p	8.90	34.45	0.46	2.98	300	9.41	34.50	0.53	2.95	26.68	143.1	0.628
	379p	7.85	34.45	0.46	3.10	400	7.53	34.46	0.41	3.13	26.94	119.1	0.759
	418p	7.31	34.47	0.35	3.13								
130.40	CREST; November 15, 1950; 0135 GCT; 26°05'N, 114°09'W; sounding, 1,080 fm; wind, 290°, force 2; weather, partly cloudy; sea, slight; wire angle, 10°.												
	0	21.20	-	4.96	0.82	0	21.20	(34.26)	4.96	0.82	(23.90)	(401.7)	(0.000)
	10	20.95	34.25	5.03	0.74	10	20.95	34.25	5.03	0.74	23.96	396.4	0.040
	25	20.08	34.11	4.94	0.76	20	20.47	34.15	4.99	0.75	24.01	391.7	0.079
	49	13.54	-	4.50	1.24	30	18.45	34.07	4.87	0.85	24.47	348.2	0.116
	69	12.87	33.89	3.09	1.87	50	13.48	33.95	4.43	1.27	25.50	250.1	0.176
	97	11.96	34.18	1.87	2.50	75	12.65	33.90	2.72	2.02	25.63	238.6	0.237
	237p	10.17	34.58	0.47	2.96	100	(11.85)	(34.21)	(1.70)	(2.53)	(26.02)	(201.7)	(0.292)
	275p	8.82	-	0.47	3.00	150	(11.09)	(34.40)	(0.87)	(2.76)	(26.31)	(175.5)	(0.387)
	388p	7.94	34.45	0.36	3.15	200	(10.66)	(34.53)	(0.59)	(2.90)	(26.49)	(159.6)	(0.470)
	547p	6.37	34.45	0.24	3.36	250	9.77	34.58	0.48	2.97	26.68	142.0	(0.546)
	704p	5.36	34.42	0.31	3.37	300	8.53	34.53	0.48	3.02	26.84	127.0	(0.613)
	869p	4.60	34.51	0.34	3.39	400	7.85	34.45	0.35	3.17	26.88	124.5	(0.739)
						500	6.82	34.45	0.28	3.31	27.03	111.3	(0.856)
						600	5.98	34.44	0.24	3.37	27.13	102.0	(0.963)
						700	5.38	34.42	0.31	3.37	27.19	96.9	(1.062)
						800	4.90	34.45	0.35	3.38	27.27	89.7	(1.156)
						1000	(4.09)	(34.53)			(27.42)	(75.7)	(1.322)

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

CREST; November 14, 1950; 1958 GCT; 25°52'N, 114°45'W; sounding, 1,900 fm; wind, calm; weather, partly cloudy; sea, slight; wire angle, 10°. 130.50

0	20.14	33.55	4.93	0.41	0	20.14	33.55	4.93	0.41	23.64	426.2	0.000
10	19.90	33.62	5.15	0.47	10	19.90	33.62	5.15	0.47	23.76	415.4	0.042
24	19.53	33.60	4.88	0.47	20	19.53	33.61	4.90	0.47	23.85	407.4	0.083
49	15.58	33.33	5.39	0.58	30	19.53	33.56	4.93	0.47	23.81	411.3	0.124
73	14.65	33.60	5.32	0.57	50	15.52	33.33	5.39	0.58	24.59	336.9	0.199
97	12.36	33.53	5.02	1.00	75	14.56	33.60	5.30	0.58	25.01	298.0	0.278
149	11.84	34.20	1.54	2.52	100	12.30	33.54	4.97	1.16	25.42	259.2	0.348
196	10.56	34.42	1.15	2.68	150	11.83	34.20	1.52	2.53	26.01	204.1	0.463
289	9.47	34.54	0.46	2.99	200	10.47	34.43	1.15	2.69	26.45	163.7	0.556
387	7.91	-	0.36	3.26	250	9.82	34.51	0.82	2.86	26.62	148.0	0.633
482	7.18	34.58	0.27	3.33	300	9.35	34.54	0.43	3.02	26.72	139.2	0.706
581	6.17	34.43	0.15	3.36	400	7.79	34.57	0.35	3.28	26.99	114.8	0.832
775	5.17	34.54	0.27	3.33	500	6.98	34.56	0.25	3.34	27.10	105.4	0.942
970	4.27	34.52	0.42	3.34	600	6.03	34.44	0.15	3.36	27.13	102.7	1.047
1169	3.68	34.61	0.64	3.34	700	5.51	34.52	0.21	3.34	27.26	91.2	1.144
					800	5.05	34.54	0.28	3.33	27.33	84.9	1.232
					1000	4.17	34.53	0.46	3.34	27.42	76.7	1.393

CREST; November 14, 1950; 1534 GCT; 25°35'N, 115°16'W; sounding, 2,080 fm; wind, calm; weather, cloudy; sea, slight; wire angle, 7°. 130.60

0	20.71	-	4.87	0.53	0	20.71	(33.88)	4.87	0.53	(23.74)	(416.7)	(0.000)
10	20.70	33.86	4.63	0.49	10	20.70	33.86	4.63	0.49	23.73	418.2	0.042
25	20.47	33.75	4.73	0.48	20	20.60	33.80	4.65	0.49	23.71	420.3	0.084
50	16.80	33.66	5.47	0.52	30	19.85	33.72	4.99	0.59	23.85	407.6	0.125
74	14.89	33.64	5.38	0.57	50	16.80	33.66	5.47	0.52	24.55	340.7	0.200
98	12.84	33.73	4.27	1.14	75	14.85	33.64	5.35	0.58	24.98	301.0	0.280
151	10.75	34.00	2.88	2.15	100	12.72	33.74	4.23	1.26	25.49	252.3	0.349
199	10.44	34.40	1.35	2.67	150	10.78	33.99	2.90	2.15	26.05	200.3	0.462
294	9.15	34.49	0.72	3.05	200	10.43	34.40	1.34	2.68	26.43	165.2	0.554
395	8.20	34.56	0.28	3.28	250	9.86	34.46	0.92	2.90	26.57	152.4	0.633
492	7.02	34.56	0.24	3.31	300	9.09	34.49	0.71	3.06	26.72	138.7	0.706
593	6.25	34.49	0.15	3.46	400	8.14	34.56	0.28	3.28	26.93	120.7	0.835
791	4.92	34.56	0.36	3.47	500	6.94	34.56	0.25	3.32	27.10	104.9	0.948
988	4.16	34.67	0.46	3.49	600	6.19	34.49	0.15	3.47	27.15	101.1	1.052
1187	3.60	34.58	0.77	3.52	700	5.56	34.51	0.27	3.47	27.24	92.6	1.148
					800	4.86	34.57	0.37	3.47	27.37	80.3	1.235
					1000	4.12	34.67	0.47	3.49	27.53	65.8	1.381

CREST; November 14, 1950; 1004 GCT; 25°13.5'N, 115°55.5'W; sounding, 2,200 fm; wind, 220°, force 3; weather, clear; sea, slight; wire angle, 5°. 130.70

0	20.96	33.89	4.70	0.50	0	20.96	33.89	4.70	0.50	23.68	422.3	0.000
10	20.96	33.80	4.68	0.53	10	20.96	33.80	4.68	0.53	23.61	429.2	0.043
25	21.00	33.82	4.69	0.46	20	20.99	33.81	4.68	0.49	23.61	429.6	0.086
49	17.79	33.91	5.26	0.41	30	20.95	33.83	4.74	0.43	23.64	427.5	0.128
73	15.78	-	4.83	0.50	50	17.50	33.91	5.25	0.41	24.58	338.3	0.205
97	13.29	-	4.56	0.82	75	15.67	33.94	4.79	0.52	25.03	296.3	0.284
150	10.64	33.98	2.82	2.01	100	13.08	33.94	4.51	0.97	25.58	244.5	0.352
199	10.19	34.29	1.47	2.50	150	10.64	33.98	2.82	2.01	26.07	198.6	0.462
295	9.14	34.49	0.49	2.95	200	10.18	34.30	1.46	2.51	26.39	168.4	0.555
397	7.90	34.49	0.30	3.19	250	9.70	34.44	0.78	2.80	26.59	151.2	0.634
493	6.87	34.56	0.19	3.20	300	9.09	34.49	0.48	2.98	26.72	138.7	0.707
593	6.25	34.51	0.26	3.28	400	7.87	34.49	0.29	3.19	26.91	121.9	0.836
791	5.02	34.52	0.27	3.38	500	6.82	34.56	0.20	3.21	27.12	103.2	0.949
988	4.22	34.63	0.41	3.44	600	6.20	34.51	0.25	3.28	27.16	99.8	1.051
1193	3.65	34.65	0.68	3.38	700	5.61	34.52	0.26	3.34	27.24	92.5	1.147
					800	4.98	34.52	0.28	3.38	27.32	85.5	1.236
					1000	4.18	34.63	0.43	3.44	27.49	69.5	1.391

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

130.80 CREST; November 14, 1950; 0416 GCT; 24°52'N, 116°36'W; sounding, 2,100 fm; wind, calm; weather, cloudy; sea, slight; wire angle, 0°.

0	21.58	33.96	4.86	0.48	0	21.58	33.96	4.86	0.48	23.57	433.4	0.000
10	21.58	34.00	4.99	0.51	10	21.58	34.00	4.99	0.51	23.60	430.8	0.043
25	21.60	33.99	5.00	0.49	20	21.61	34.00	5.00	0.50	23.59	432.0	0.086
50	17.64	33.62	5.26	0.53	30	21.60	33.96	5.02	0.49	23.56	435.0	0.130
74	16.26	33.68	5.65	0.60	50	17.64	33.62	5.26	0.53	24.32	362.6	0.209
98	14.47	33.68	5.17	0.63	75	16.22	33.68	5.65	0.60	24.70	327.2	0.296
151	10.75	33.82	3.23	2.00	100	14.30	33.68	5.09	0.63	25.12	287.5	0.373
199	10.29	34.18	2.04	2.62	150	10.77	33.82	3.25	2.00	25.92	212.6	0.497
296	9.20	34.43	0.69	2.98	200	10.29	34.18	2.00	2.62	26.28	179.1	0.596
398	8.13	34.51	0.57	3.11	250	9.74	34.34	1.23	2.86	26.50	159.2	0.680
495	7.13	34.40	0.33	3.24	300	9.17	34.44	0.68	2.99	26.67	143.7	0.755
597	6.33	34.43	0.26	3.35	400	8.10	34.51	0.56	3.11	26.89	123.8	0.889
796	5.07	34.52	0.33	3.38	500	7.10	34.40	0.37	3.24	26.95	118.9	1.011
993	4.29	34.52	0.47	3.36	600	6.29	34.43	0.25	3.35	27.09	106.9	1.124
1194	3.64	34.63	0.67	3.35	700	5.64	34.50	0.27	3.37	27.22	94.4	1.224
					800	5.05	34.52	0.34	3.38	27.31	86.4	1.315
					1000	4.27	34.52	0.43	3.35	27.40	78.7	1.479

130.90 CREST; November 13, 1950; 2203 GCT; 24°31'N, 117°16'W; sounding, 2,050 fm; wind, calm; weather, overcast; sea, slight; wire angle, 0°.

0	21.33	33.78	5.19	0.58	0	21.33	33.78	5.19	0.58	23.50	439.6	0.000
10	21.25	33.80	4.77	0.57	10	21.25	33.80	4.77	0.57	23.53	436.7	0.044
25	21.27	33.79	5.08	0.52	20	21.25	33.79	4.95	0.53	23.53	437.8	0.088
50	18.29	33.58	5.53	0.58	30	21.27	33.78	5.22	0.53	23.51	439.4	0.131
74	16.64	33.69	5.38	0.62	50	18.29	33.58	5.53	0.58	24.13	380.7	0.213
99	14.46	33.62	5.08	0.78	75	16.54	33.69	5.36	0.52	24.64	333.5	0.303
153	11.25	33.89	3.27	1.87	100	14.40	33.62	5.07	0.82	25.06	293.9	0.381
201	10.08	34.14	2.15	2.30	150	11.35	33.88	3.39	1.83	25.86	218.3	0.509
297	9.37	34.42	0.64	3.11	200	10.10	34.14	2.17	2.29	26.28	178.8	0.608
399	8.20	-	0.37	3.28	250	9.65	34.32	1.26	2.76	26.50	159.2	0.693
495	7.00	34.51	0.24	3.46	300	9.35	34.42	0.61	3.22	26.63	148.0	0.769
596	6.08	34.52	0.25	3.49	400	8.18	34.49	0.36	3.28	26.87	126.5	0.907
796	4.90	34.45	0.34	3.52	500	6.94	34.51	0.25	3.45	27.06	108.6	1.024
995	4.25	34.56	0.44	3.64	600	6.05	34.52	0.25	3.49	27.19	97.0	1.127
1201	3.64	34.56	0.62	3.51	700	5.40	34.48	0.29	3.51	27.24	92.7	1.222
					800	4.87	34.45	0.36	3.52	27.28	89.3	1.313
					1000	4.23	34.56	0.44	3.54	27.42	75.6	1.476

130.100 CREST; November 13, 1950; 1648 GCT; 24°18.5'N, 117°56'W; sounding, 2,170 fm; wind, calm; weather, cloudy; sea, moderate; wire angle, 4°.

0	21.14	33.78	4.94	-	0	21.14	33.73	4.94	(0.70)	23.51	438.6	0.000
10	21.15	33.77	4.94	0.61	10	21.15	33.77	4.94	0.61	23.54	436.3	0.044
25	21.16	33.74	4.88	0.52	20	21.17	33.76	4.90	0.55	23.53	437.9	0.087
50	17.55	33.68	5.48	0.47	30	21.11	33.73	4.91	0.51	23.52	438.8	0.131
75	16.33	33.64	5.45	0.46	50	17.55	33.68	5.48	0.47	24.39	356.2	0.211
98	14.72	33.62	5.32	0.51	75	16.33	33.64	5.45	0.46	24.65	332.3	0.297
151	11.84	33.69	4.23	0.56	100	14.50	33.62	5.31	0.51	25.04	295.9	0.375
199	10.78	34.23	1.73	2.62	150	11.90	33.68	4.28	0.56	25.60	242.8	0.510
295	9.15	34.47	0.75	3.05	200	10.78	34.24	1.72	2.63	26.24	183.0	0.616
396	8.04	34.47	0.31	3.29	250	9.92	34.41	1.07	2.91	26.52	157.0	0.702
492	6.93	34.43	0.24	3.30	300	9.10	34.47	0.71	3.07	26.71	140.3	0.776
592	6.08	34.45	0.26	3.40	400	8.00	34.47	0.31	3.29	26.88	125.3	0.908
791	4.88	34.47	0.31	3.51	500	6.85	34.43	0.25	3.31	27.01	113.2	1.028
988	4.06	34.58	0.57	3.51	600	6.03	34.45	0.25	3.41	27.14	101.9	1.135
1191	3.57	34.52	0.69	3.46	700	5.39	34.46	0.27	3.48	27.22	94.1	1.233
					800	4.84	34.47	0.32	3.51	27.30	87.5	1.324
					1000	4.02	34.58	0.58	3.51	27.47	71.2	1.482

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

CREST; November 13, 1950; 1110 GCT; 23°57'N, 118°33'W; sounding, 2,280 fm; wind, calm; weather, clear; sea, slight; wire angle, 0°. 130.110

0	21.98	34.03	4.93	0.50	0	21.98	34.03	4.93	0.50	23.51	438.9	0.000
10	22.00	34.09	4.92	0.53	10	22.00	34.09	4.92	0.53	23.55	435.4	0.044
25	21.98	34.02	4.90	0.61	20	21.97	34.07	4.90	0.60	23.54	436.4	0.087
50	19.01	33.98	5.40	0.58	30	21.85	34.01	4.93	0.61	23.53	438.0	0.131
74	16.52	33.68	5.60	0.57	50	19.01	33.98	5.40	0.58	24.26	368.8	0.212
98	14.59	33.73	5.53	0.67	75	16.47	33.68	5.60	0.57	24.65	332.7	0.299
151	11.08	33.87	3.28	2.01	100	14.50	33.73	5.49	0.69	25.12	287.9	0.377
200	10.37	34.27	1.57	2.64	150	11.11	33.86	3.34	2.00	25.89	215.5	0.503
297	8.99	34.48	0.78	3.10	200	10.37	34.27	1.57	2.64	26.34	173.8	0.601
398	8.10	34.51	0.25	3.25	250	9.69	34.42	1.08	2.95	26.57	152.5	0.682
496	6.92	34.47	0.22	3.45	300	8.97	34.48	0.76	3.10	26.74	137.6	0.754
598	6.08	34.54	0.24	3.52	400	8.08	34.51	0.25	3.25	26.90	123.5	0.884
797	4.84	34.50	0.37	3.52	500	6.88	34.47	0.23	3.45	27.04	110.7	1.002
994	4.10	34.62	0.51	3.51a)	600	6.06	34.54	0.25	3.52	27.20	95.7	1.105
1199	3.54	34.65	0.74	3.57	700	5.40	34.51	0.29	3.52	27.26	90.5	1.198
					800	4.83	34.50	0.37	3.52	27.32	85.1	1.285
					1000	4.08	34.62	0.53	3.51	27.50	69.0	1.440

CREST; November 15, 1950; 1128 GCT; 25°56.5'N, 113°11'W; sounding, 108 fm; wind, 320°, force 2; weather, clear; sea, slight; wire angle, 4°. 133.30

0	21.18	34.13	4.85	0.58	0	21.18	34.13	4.85	0.58	23.81	410.4	0.000
10	21.17	34.10	4.63	0.61	10	21.17	34.10	4.63	0.61	23.78	412.9	0.041
25	20.15	33.95	4.93	0.62	20	20.85	34.00	4.75	0.61	23.79	412.2	0.082
45	14.88	33.66	5.28	0.79	30	19.30	33.88	5.02	0.64	24.11	382.5	0.122
65	12.98	33.73	4.21	1.28	50	14.30	33.66	5.22	0.90	25.11	287.6	0.189
85	12.34	33.91	3.05	1.77	75	12.51	33.81	3.61	1.58	25.59	242.6	0.255
105	12.20	34.27	1.69	2.33	100	12.22	34.21	1.95	2.22	25.95	208.5	0.312
125	12.40	34.43	1.04	2.62	150	12.53	34.64	0.45	2.85	26.23	184.0	0.410
154	12.55	34.67	0.35	2.88								

CREST; November 15, 1950; 1623 GCT; 25°36.5'N, 113°49'W; sounding, 1,690 fm; wind, 320°, force 4; weather, cloudy; sea, moderate; wire angle, 6°. 133.40

0	21.10	34.16	4.39	0.76	0	21.10	34.16	4.39	0.76	23.85	406.4	0.000
10	21.09	34.23	4.76	0.83	10	21.09	34.23	4.76	0.83	23.90	401.4	0.040
25	16.34	33.53	5.57	0.73	20	19.65	34.09	5.55	0.74	24.18	375.5	0.079
50	13.10	33.64	4.82	1.10	30	15.40	33.54	5.55	0.77	24.78	138.5	0.114
74	11.64	33.78	3.53	1.76	50	13.10	33.64	4.82	1.10	25.34	265.6	0.172
98	12.66	34.58	0.56	3.13	75	11.45	33.79	3.45	1.84	25.77	224.9	0.234
152	12.60	34.76	0.24	3.22	100	12.67	34.62	0.52	3.14	26.18	186.8	0.285
200	11.89	34.77	0.24	3.33	150	12.62	34.76	0.25	3.21	26.30	176.9	0.376
295	10.61	34.72	0.16	3.35	200	11.89	34.77	0.24	3.33	26.45	163.8	0.461
396	8.81	34.58	0.23	3.41	250	11.23	34.75	0.22	3.35	26.56	154.5	0.541
492	7.28	34.47	0.29	3.44	300	10.52	34.72	0.16	3.35	26.66	145.4	0.616
591	6.26	34.45	0.20	3.58	400	8.74	34.57	0.24	3.41	26.84	129.2	0.753
791	4.93	34.47	0.33	3.63	500	7.20	34.47	0.28	3.45	26.99	115.2	0.875
986	4.12	34.48	0.50	3.66	600	6.19	34.45	0.20	3.59	27.12	104.1	0.985
1189	3.62	34.52	0.73	3.61	700	5.47	34.46	0.24	3.63	27.21	95.1	1.084
					800	4.88	34.47	0.33	3.63	27.29	88.0	1.176
					1000	4.08	34.48	0.52	3.66	27.39	79.3	1.343

a) Alternate value, 3.67 μg at/L, not used in interpolation.

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

133.50 CREST; November 15, 1950; 2200 GCT; 25°15'N, 114°30.5'W; sounding, 2,100 fm; wind, 330°, force 4; weather, cloudy; sea, moderate; wire angle, 29°.

0	20.50	34.05	4.49	0.61	0	20.50	34.05	4.49	0.61	23.93	399.0	0.000
9	20.30	34.04	4.50	0.62	10	20.29	34.04	4.50	0.62	23.97	394.8	0.040
22	20.08	33.99	4.50	0.57	20	20.11	34.00	4.50	0.58	23.99	393.5	0.079
43	15.33	33.32	5.16	0.53	30	18.60	33.84	4.60	0.55	24.26	368.5	0.117
64	13.58	33.39	4.66	0.64	50	15.55	33.33	5.05	0.55	24.59	337.6	0.188
84	13.42	33.84	3.19	1.45	75	13.85	33.55	3.92	1.07	25.12	287.4	0.266
126	12.22	34.29	1.31	2.49	100	12.85	34.12	2.20	1.93	25.76	226.9	0.330
165	11.04	34.46	0.89	2.65	150	11.50	34.40	1.01	2.60	26.24	182.7	0.433
243	10.73	34.75	0.25	3.02	200	10.87	34.60	0.54	2.81	26.51	158.1	0.518
325	9.66	34.60	0.17	3.03	250	10.68	34.74	0.23	3.02	26.65	145.6	0.593
402	8.34	34.54	0.19	3.20u	300	10.09	34.64	0.18	3.03	26.68	144.0	0.666
487	7.23	34.49	0.22	3.13	400	8.40	34.54	0.19	3.07	26.87	126.2	0.801
654	5.80	34.47	0.18	3.21	500	7.10	34.49	0.22	3.14	27.02	112.3	0.921
824	4.86	34.54	0.29	3.21	600	6.20	34.47	0.21	3.19	27.13	102.7	1.028
1016	4.00	34.54	0.51	3.25	700	5.52	34.48	0.20	3.21	27.22	94.3	1.127
					800	4.98	34.53	0.26	3.21	27.33	84.8	1.216
					1000	4.07	34.54	0.50	3.24	27.43	74.8	1.375

133.60 CREST; November 16, 1950; 0315 GCT; 24°53'N, 115°09.5'W; sounding, 1,990 fm; wind, 360°, force 4; weather, clear; sea, moderate, wire angle, 19°.

0	20.92	33.69	4.89	0.52	0	20.92	33.69	4.89	0.52	23.54	436.1	0.000
10	20.92	33.66	4.81	0.52	10	20.92	33.66	4.81	0.52	23.51	438.6	0.044
24	20.87	33.69	5.06	0.53	20	20.88	33.67	4.90	0.53	23.54	436.9	0.088
47	18.27	33.80	5.57	0.51	30	20.87	33.72	5.38	0.53	23.58	433.4	0.131
70	16.07	33.60	5.57	0.53	50	17.95	33.80	5.57	0.51	24.39	356.7	0.210
92	13.90	33.50	5.53	0.67	75	15.63	33.56	5.56	0.55	24.74	323.2	0.295
141	11.17	33.78	3.38	1.87	100	13.40	33.51	5.38	0.76	25.18	282.1	0.371
185	10.89	34.21	1.80	2.49	150	11.08	33.85	2.90	2.07	25.89	215.7	0.495
276	9.60	34.34	0.69	2.95	200	10.77	34.30	1.54	2.61	26.29	178.4	0.594
369	8.52	34.45	0.36	3.18	250	10.07	34.50	0.94	2.88	26.57	152.9	0.677
458	7.51	34.51	0.34	3.20	300	9.25	34.53	0.55	3.03	26.73	138.3	0.749
554	6.57	34.52	0.22	3.25	400	8.23	34.46	0.35	3.20	26.84	129.5	0.883
745	5.32	34.54	0.30	3.27	500	7.08	34.52	0.30	3.20	27.05	109.8	1.003
933	4.40	34.58	0.44	3.36	600	6.22	34.53	0.25	3.26	27.17	98.6	1.107
1136	3.77	34.54	0.67	3.33	700	5.58	34.54	0.29	3.27	27.26	90.6	1.201
					800	5.04	34.55	0.34	3.30	27.34	84.1	1.288
					1000	4.13	34.58	0.52	3.35	27.46	72.5	1.446

133.70 CREST; November 16, 1950; 0820 GCT; 24°35'N, 115°40'W; sounding, 2,000 fm; wind, 360°, force 4; weather, partly cloudy; sea, moderate; wire angle, 11°.

0	20.87	33.68	5.01	0.39	0	20.87	33.68	5.01	0.39	23.55	435.2	0.000
10	20.88	33.73	4.94	0.40	10	20.88	33.73	4.95	0.40	23.58	432.2	0.043
25	20.90	33.72	5.09	0.38	20	20.89	33.72	5.00	0.39	23.57	433.6	0.087
49	17.85	33.67	5.58	0.39	30	20.90	33.71	5.22	0.38	23.56	434.9	0.130
73	16.80	33.73	5.74	0.41	50	17.78	33.67	5.60	0.39	24.33	362.2	0.210
97	13.91	33.50	5.45	0.70	75	16.70	33.73	5.73	0.42	24.63	334.1	0.297
148	11.40	33.80	3.11	1.93	100	13.59	33.50	5.37	0.78	25.13	286.6	0.374
196	10.65	34.29	1.47	2.34	150	11.38	33.84	2.99	1.97	25.82	221.7	0.501
291	9.50	34.49	0.64	2.85	200	10.58	34.31	1.41	2.37	26.33	174.4	0.601
390	8.24	34.52	0.37	2.98	250	9.99	34.44	0.90	2.67	26.54	156.0	0.683
485	7.30	34.42	0.28	3.03	300	9.40	34.49	0.59	2.87	26.67	143.7	0.758
584	6.35	34.51	0.24	3.21	400	8.12	34.51	0.48	2.99	26.89	124.1	0.892
769	5.18	34.51	0.29	3.28	500	7.14	34.42	0.27	3.04	26.96	118.0	1.013
976	4.28	34.58	0.47	3.21	600	6.22	34.51	0.25	3.22	27.16	100.1	1.122
1180	3.68	34.61	0.73	3.21	700	5.57	34.51	0.25	3.27	27.24	92.7	1.218
					800	5.00	34.52	0.30	3.28	27.32	85.8	1.307
					1000	4.20	34.59	0.52	3.21	27.46	72.7	1.465

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

CREST; November 17, 1950; 1600 GCT; 25°19.5'N, 112°45'W; sounding, 202 fm; wind, 320°, force 4; weather, partly cloudy; sea, rough; wire angle, 15°. 137.30

0	22.62	34.40	4.46	0.59	0	22.62	34.40	4.46	0.59	23.61	429.3	0.000
10	22.62	34.38	4.77	0.59	10	22.62	34.38	4.77	0.59	23.59	431.3	0.043
24	22.60	34.33	4.77	0.61	20	22.61	34.35	4.77	0.61	23.57	433.4	0.086
48	15.88	33.69	5.23	0.80	30	22.60	34.04	4.80	0.65	23.34	455.9	0.131
72	14.12	33.93	3.04	1.79	50	15.15	33.69	5.23	0.87	24.95	302.9	0.207
96	13.62	34.42	0.91	2.80	75	14.07	34.01	2.75	1.94	25.43	258.1	0.277
141	12.83	34.65	0.24	3.07	100	13.55	34.45	0.75	2.85	25.87	216.2	0.336
196	11.87	34.69	0.20	3.17	150	12.69	34.66	0.22	3.09	26.21	185.5	0.437
244	10.98	34.67	0.20	3.19	200	11.80	34.69	0.20	3.17	26.41	168.0	0.525
293	10.57	34.56	0.18	3.21	250	10.91	34.66	0.20	3.19	26.55	155.5	0.605
					300	(10.55)	(34.56)	(0.19)	(3.22)	(26.53)	(157.7)	(0.684)

CREST; November 17, 1950; 1310 GCT; 25°09.5'N, 113°03.5'W; sounding, 350 fm; wind, missing; weather, partly cloudy; sea, very rough; wire angle, 18°. 137.35

0	22.30	34.18	4.74	0.69	0	22.30	34.18	4.74	0.69	23.53	436.6	0.000
9	22.32	34.17	4.79	0.66	10	22.32	34.17	4.80	0.66	23.52	438.2	0.044
23	22.31	34.18	4.80	0.63	20	22.31	34.18	4.80	0.63	23.53	437.6	0.088
47	16.26	33.61	5.34	0.65	30	22.30	34.14	4.83	0.63	23.50	440.6	0.131
71	13.76	33.58	4.99	0.95	50	15.45	33.60	5.35	0.66	24.81	315.7	0.207
94	13.65	–	2.20	2.12	75	13.74	33.58	4.50	1.60	25.16	283.0	0.282
145	11.17	34.36	1.28	2.40	100	13.52	33.65	1.99	2.17	25.26	274.2	0.352
189	10.75	34.58	0.61	2.90	150	11.12	34.40	1.18	2.43	26.31	176.0	0.464
234	10.30	34.63	0.46	3.00	200	10.65	34.60	0.55	2.94	26.55	154.2	0.547
279	9.75	34.60	0.38	3.05	250	10.12	34.62	0.42	3.02	26.65	144.9	0.621
332	9.00	34.54	0.24	3.04	300	9.46	34.58	0.32	3.05	26.73	138.0	0.692
378	8.25	34.51	0.31	3.04	400	7.88	34.53	0.29	3.07	26.94	119.0	0.820
431	7.50	34.54	0.26	3.13								
475	7.25	34.51	0.25	3.25								

CREST; November 17, 1950; 0925 GCT; 25°00'N, 113°23.5'W; sounding, 1,600 fm; wind, 360°, force 5; weather, partly cloudy; sea, very rough; wire angle, 35°. 137.40

0	23.13	34.34	4.66	0.63	0	23.13	34.34	4.66	0.63	23.42	447.6	0.000
10	23.15	34.36	4.71	0.66	10	23.15	34.36	4.71	0.66	23.43	447.0	0.045
25	23.16	34.31	4.59	0.63	20	23.16	34.35	4.60	0.63	23.42	448.4	0.090
45	18.87	34.07	5.15	0.88	30	23.15	34.25	4.60	0.65	23.34	455.7	0.135
65	13.55	33.89	3.85	1.57	50	17.27	34.03	5.10	1.00	24.73	324.3	0.213
80p	12.55	33.89	2.88r	1.07r	75	12.85	33.87	3.45	1.71	25.57	244.6	0.284
89	11.96	33.86	2.98	1.86	100	11.76	33.87	2.69	2.00	25.78	225.1	0.342
129	–	34.13	4.85r	0.70r	150	11.56	34.70	0.70	2.86	26.46	161.7	0.440
183p	11.48	34.80	0.19	3.00	200	11.31	34.81	0.20	3.00	26.60	147.4	0.516
300p	9.78	34.61	0.26	2.99	250	10.60	34.74	0.23	3.00	26.66	144.2	0.589
403p	8.38	34.45	0.31	3.20	300	9.78	34.61	0.26	2.99	26.70	141.0	0.661
492p	7.22	34.61	0.29	3.27	400	8.41	34.45	0.30	3.19	26.80	132.9	0.798
712p	5.56	34.52	0.26	3.25	500	7.17	34.61	0.29	3.27	27.10	104.4	0.917
913p	4.56	34.60	0.41	3.42	600	6.30	34.58	0.25	3.25	27.20	96.0	1.017
1109p	3.80	34.61	0.68	3.26	700	5.64	34.53	0.26	3.25	27.25	92.2	1.111
					800	5.09	34.54	0.30	3.31	27.32	85.5	1.199
					1000	4.21	34.60	0.52	3.39	27.47	72.0	1.357

S10

CCOFI 5011

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

137.50 CREST; November 17, 1950; 0328 GCT; 24°39'N, 114°01.5'W; sounding, 2,050 fm; wind, 360°, force 5; weather, clear; sea, rough; wire angle, 18°.

0	22.47	34.23	4.49	0.67	0	22.47	34.23	4.49	0.67	23.52	437.5	0.000
10	22.55	34.16	4.55	0.63	10	22.55	34.16	4.55	0.63	23.45	445.1	0.044
24	22.49	34.22	4.87	0.70	20	22.49	34.22	4.85	0.68	23.51	439.5	0.088
51	14.18	33.68	4.87	1.06	30	22.49	34.16	4.87	0.77	23.46	444.2	0.133
74	12.20	33.78	3.17	1.96	50	14.30	33.68	4.87	1.03	25.12	286.2	0.206
102	10.68	33.99	2.68	2.28	75	12.15	33.78	3.15	1.97	25.63	238.2	0.271
152	9.46	34.14	2.26	2.67	100	10.75	33.99	2.70	2.26	26.05	198.7	0.326
202	9.74	34.43	1.01	3.07	150	9.46	34.14	2.29	2.65	26.39	167.4	0.418
302	8.93	34.46	0.42	3.26	200	9.74	34.42	1.04	3.05	26.56	152.3	0.497
407	7.68	34.52	0.33	3.42	250	9.58	34.46	0.65	3.19	26.62	147.8	0.572
509	6.95	34.58	0.26	3.53	300	8.98	34.46	0.43	3.26	26.72	139.2	0.644
611	5.87	34.52	0.27	3.64	400	7.74	34.52	0.34	3.40	26.96	117.7	0.772
809	4.86	34.51	0.46	3.51	500	7.02	34.58	0.27	3.53	27.11	104.5	0.883
1015	4.06	34.56	0.52	3.49	600	5.99	34.52	0.27	3.64	27.20	96.2	0.984
1214	3.53	34.63	0.73	3.48	700	5.33	34.52	0.34	3.58	27.28	88.9	1.076
					800	4.90	34.51	0.44	3.51	27.32	85.3	1.163
					1000	4.10	34.55	0.53	3.49	27.44	74.4	1.323

137.60 CREST; November 16, 1950; 2129 GCT; 24°20'N, 114°39.5'W; sounding, 2,040 fm; wind, 360°, force 5; weather, partly cloudy; sea, very rough; wire angle, 31°.

0	20.32	33.72	5.08	0.54	0	20.32	33.72	5.08	0.54	23.72	418.4	0.000
9	20.34	33.74	4.94	0.54	10	20.34	33.75	4.93	0.54	23.74	417.0	0.042
21	20.40	33.82	4.81	0.57	20	20.40	33.82	4.81	0.57	23.78	413.8	0.083
48	14.91	33.35	5.03	0.60	30	19.25	33.68	4.82	0.59	23.97	395.8	0.124
68	13.67	33.71	4.52	0.88	50	14.73	33.35	5.00	0.61	24.78	319.0	0.195
92	11.88	33.69	3.91	1.40	75	13.15	33.78	4.35	1.00	25.44	256.9	0.267
210p	11.07	34.65	0.51	2.91	100	(11.35)	(33.69)	(3.59)	(1.65)	(25.71)	(231.1)	(0.328)
334p	9.26	34.53	0.33	3.08	150	(10.44)	(34.48)	(1.54)	(2.51)	(26.49)	(158.4)	(0.426)
446p	7.87	34.51	0.26	3.22	200	(11.08)	(34.64)	(0.58)	(2.87)	(26.50)	(158.8)	(0.505)
556p	6.49	34.43	0.36	3.33	250	10.74	34.62	0.38	3.01	26.55	155.5	(0.583)
765p	5.11	34.49	0.26	3.40	300	9.85	34.57	0.34	3.06	26.66	145.1	(0.659)
967p	4.34	34.52	0.42	3.31	400	8.44	34.52	0.29	3.15	26.85	128.2	(0.795)
1165p	3.74	34.51	0.67	3.35	500	7.14	34.46	0.31	3.28	27.00	115.1	(0.917)
					600	6.07	34.44	0.33	3.36	27.12	103.2	(1.026)
					700	5.38	34.47	0.26	3.39	27.23	93.2	(1.124)
					800	4.99	34.50	0.27	3.40	27.30	87.1	(1.215)
					1000	4.23	34.52	0.45	3.31	27.40	78.2	(1.380)

137.70 CREST; November 16, 1950; 1443 GCT; 23°56'N, 115°21.5'W; sounding, 2,100 fm; wind, 320°, force 5; weather, partly cloudy; sea, very rough; wire angle, 28°.

0	22.79	34.25	4.57	0.55	0	22.79	34.25	4.57	0.55	23.45	444.8	0.000
9	22.80	34.23	4.42	0.57	10	22.80	34.23	4.42	0.57	23.43	446.8	0.045
23	22.80	34.32	4.57	0.56	20	22.80	34.32	4.51	0.57	23.50	440.7	0.089
48	16.74	33.71	5.43	1.24	30	22.79	34.18	5.00	0.58	23.39	450.9	0.134
69	14.09	33.80	4.04	1.41	50	16.18	33.71	5.42	1.26	24.74	323.4	0.211
94	11.86	33.85	2.91	1.80	75	13.35	33.82	3.65	1.46	25.43	257.8	0.284
136	11.42	-	1.28	2.70	100	11.74	33.86	2.61	2.16	25.77	225.5	0.344
180	11.78	34.78	0.49	3.06	150	11.48	34.69	0.95	2.87	26.47	161.0	0.441
266	10.13	34.67	0.35	3.10	200	11.69	34.77	0.40	3.08	26.49	160.1	0.521
359	8.34	-	0.24	3.21	250	10.60	34.70	0.34	3.11	26.63	147.2	0.597
447	7.29	34.40	0.26	3.28	300	9.32	34.61	0.28	3.15	26.78	133.5	0.668
540	6.58	34.49	0.20	3.33	400	7.80	34.44	0.25	3.25	26.88	124.5	0.797
					500	6.87	34.46	0.22	3.31	27.03	111.3	0.915

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
BLACK DOUGLAS; November 20, 1950; 1120 GCT; 24°36'N, 112°43'W; sounding, 220 fm; wind, 320°, force 4; weather, clear; sea, very rough; wire angle, 11°.													140.35
0	22.76	34.23	3.83	0.50	0	22.76	34.23	3.83	0.50	23.43	445.4	0.000	
10	22.77	34.27	4.13	0.51	10	22.77	34.27	4.13	0.51	23.47	443.1	0.044	
25	22.64	34.25	4.53	0.51	20	22.68	34.26	4.43	0.51	23.49	441.8	0.089	
49	18.54	33.98	4.91	0.59	30	22.62	34.23	4.66	0.51	23.48	442.7	0.133	
73	14.70	33.86	3.66	0.99	50	18.30	33.98	4.91	0.59	24.44	351.9	0.212	
97	12.08	33.87	2.38	1.72	75	14.57	33.86	3.49	1.10	25.21	279.1	0.291	
115p	11.80	34.04	1.97	1.75r	100	12.01	33.88	2.30	1.76	25.74	228.9	0.355	
148	11.97	34.40	1.07	2.18	150	11.95	34.44	1.04	2.19	26.18	187.9	0.458	
160p	11.86	34.47	1.05u	1.92r	200	10.84	34.43	0.83	2.39	26.38	170.0	0.549	
196	10.89	34.43	0.87	2.38									
237p	10.54	34.58	0.52	2.49									
BLACK DOUGLAS; November 20, 1950; 1514 GCT; 24°25.5'N, 113°02'W; sounding, 1,950 fm; wind, 320°, force 4; weather, cloudy; sea, very rough; wire angle, 10°.													140.40
0	22.50	34.02	4.19	0.20r	0	22.50	34.02	4.19	(0.49)	23.35	453.5	0.000	
10	22.50	34.04	3.87	0.43	10	22.50	34.04	3.87	0.43	23.37	452.4	0.045	
25	22.51	34.00	4.66	0.37	20	22.50	34.02	4.62	0.38	23.35	454.3	0.091	
50	17.06	33.66	4.46	0.43	30	22.53	33.90	4.65	0.38	23.26	464.1	0.137	
73	13.95	33.58	4.17	0.57	50	17.06	33.66	4.46	0.43	24.49	346.5	0.218	
97	12.30	33.77	3.41	1.29	75	13.65	33.58	4.10	0.58	25.18	281.2	0.296	
148	11.48	34.35	1.28	2.26	100	12.22	33.87	3.27	1.39	25.69	233.5	0.360	
193	11.91	34.76	0.40	2.58	150	11.48	34.36	1.23	2.28	26.21	185.3	0.465	
285	10.04	34.58	0.38	2.59	200	11.86	34.50	0.39	2.58	26.25	183.0	0.557	
382	8.82	34.54	0.29	2.82	250	11.03	34.57	0.37	2.58	26.45	164.2	0.644	
473	7.76	34.55	0.18	2.91	300	9.78	34.58	0.37	2.62	26.68	143.2	0.720	
571	6.73	34.51	0.28	3.01	400	8.63	34.54	0.27	2.84	26.84	129.7	0.857	
761	5.25	34.56	0.37	2.95r	500	7.49	34.54	0.20	2.93	27.01	114.2	0.979	
953	4.33	34.52	0.42	3.10	600	6.45	34.51	0.31	(3.02)	27.13	103.2	1.088	
1158	3.74	34.60	0.67	3.03	700	5.63	34.54	0.36	(3.05)	27.26	91.3	1.185	
					800	5.03	34.56	0.37	(3.08)	27.34	83.2	1.272	
					1000	4.17	34.53	0.42	3.09	27.42	76.7	1.433	
BLACK DOUGLAS; November 20, 1950; 2105 GCT; 24°05.5'N, 113°39.5'W; sounding, 1,820 fm; wind, 320°, force 4; weather, partly cloudy; sea, very rough; wire angle, 8°.													140.50
0	22.50	33.97	5.08	0.35	0	22.50	33.97	5.08	0.35	23.32	457.1	0.000	
10	22.47	34.04	5.02	0.37	10	22.47	34.04	5.02	0.37	23.38	451.6	0.045	
25	22.30	34.04	4.87	0.34	20	22.36	34.04	4.89	0.34	23.41	449.0	0.090	
50	19.02	33.79	5.46	0.42	30	22.26	34.03	4.88	0.34	23.43	447.4	0.135	
74	14.49	33.55	5.79	0.48	50	19.02	33.79	5.46	0.42	24.11	382.9	0.218	
99	13.13	34.16	2.11	1.83	75	14.48	33.55	5.79	0.49	24.98	300.2	0.304	
152	11.16	34.34	1.68	2.14	100	13.12	34.16	2.10	1.84	25.74	229.3	0.370	
201	10.32	34.43	1.16	2.38	150	11.22	34.33	1.69	2.13	26.23	182.9	0.472	
296	9.81	34.61	0.22	2.67a)	200	10.33	34.43	1.18	2.38	26.47	161.3	0.559	
397	8.57	34.58	0.25	2.86	250	10.02	34.53	0.54	2.54	26.60	149.8	0.637	
492	7.44	34.51	0.21	3.04	300	9.79	34.61	0.21	2.68	26.70	141.2	0.710	
592	6.55	34.47	0.29	3.13	400	8.54	34.58	0.25	2.87	26.88	125.4	0.842	
790	5.07	34.52	0.29	3.33	500	7.37	34.51	0.21	3.04	27.00	114.7	0.962	
983	4.26	34.54	0.52	3.41	600	6.49	34.47	0.30	3.15	27.09	106.7	1.073	
1186	3.61	34.60	0.73	3.45	700	5.68	34.49	0.30	3.26	27.21	95.6	1.174	
					800	5.02	34.52	0.31	3.34	27.31	86.0	1.265	
					1000	4.19	34.54	0.56	3.41	27.42	76.2	1.428	

a) Alternate value, 2.84 μg at/L, not used in interpolation.

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

140.60 BLACK DOUGLAS; November 21, 1950; 0303 GCT; 23°45.5'N, 114°17.5'W; sounding, 2,180 fm; wind, 320°, force 3; weather, cloudy; sea, rough; wire angle, 21°.

0	22.62	34.31	4.98	0.55	0	22.62	34.31	4.98	0.55	23.54	435.8	0.000
7	22.62	34.27	4.94	0.54	10	22.59	34.26	4.94	0.53	23.51	438.7	0.044
23	22.58	34.25	4.93	0.45	20	22.56	34.25	4.93	0.45	23.51	439.3	0.088
46	15.69	33.66	5.06	0.57	30	22.60	34.24	5.01	0.47	23.49	441.4	0.132
70	12.66	33.68	4.31	0.96	50	14.95	33.66	5.01	0.62	24.97	300.9	0.206
94	11.56	33.89	2.85	1.57	75	12.35	33.69	3.99	1.12	25.53	248.5	0.274
143	11.37	34.40	1.24	2.15	100	11.50	34.03	2.59	1.67	25.95	208.7	0.332
191	11.36	34.70	0.33	2.37a)	150	11.35	34.54	1.05	2.21	26.37	169.7	0.427
283	10.19	34.67	0.18	2.52b)	200	11.32	34.70	0.29	2.38	26.50	158.6	0.508
375	8.75	34.60	0.17	2.59	250	10.80	34.69	0.20	2.46	26.59	151.4	0.585
467	7.50	34.49	0.25	2.74	300	9.88	34.66	0.17	2.54	26.73	139.1	0.658
570	6.72	34.51	0.22	2.83	400	8.40	34.57	0.18	2.62	26.90	123.9	0.790
762	5.33	34.51	0.27	2.95	500	7.21	34.49	0.25	2.78	27.01	113.9	0.909
952	4.42	34.54	0.40	2.93	600	6.50	34.51	0.21	2.86	27.12	103.9	1.018
1151	3.84	34.59	0.66	3.01	700	5.76	34.51	0.24	2.92	27.22	95.2	1.117
					800	5.09	34.51	0.26	2.94	27.30	87.7	1.209
					1000	4.28	34.55	0.47	2.94	27.42	76.6	1.373

140.70 BLACK DOUGLAS; November 21, 1950; 0920 GCT; 23°25'N, 114°55'W; sounding, 2,140 fm; wind, 320°, force 3; weather, partly cloudy; sea, rough, wire angle, 6°.

0	22.86	34.42	3.97	0.35	0	22.86	34.42	3.97	0.35	23.56	434.4	0.000
10	22.85	34.41	3.97	0.34	10	22.85	34.41	3.97	0.34	23.55	435.2	0.044
25	22.86	34.43	4.01	0.36	20	22.84	34.42	4.01	0.35	23.56	434.6	0.087
50	17.84	33.66	4.03	0.40	30	22.87	34.43	4.03	0.37	23.56	435.1	0.130
75	14.62	33.57	4.10	0.58	50	17.84	33.66	4.03	0.40	24.31	364.4	0.210
99	12.72	33.66	3.31	1.04	75	14.62	33.57	4.10	0.58	24.97	301.4	0.294
152	11.15	34.14	1.57	2.31	100	12.70	33.67	3.22	1.07	25.44	257.1	0.363
201	10.40	34.43	1.37	2.59c)	150	11.20	34.12	1.60	2.27	26.07	198.0	0.477
295	9.27	34.54	0.54	2.65	200	10.42	34.43	1.38	2.59	26.46	162.5	0.568
395	8.21	34.54	0.30	2.80	250	9.78	34.50	1.01	2.63	26.62	148.1	0.645
491	7.48	34.56	0.29	2.93	300	9.22	34.54	0.52	2.66	26.74	137.1	0.716
590	6.36	34.52	0.25	2.96	400	8.17	34.54	0.29	2.80	26.91	122.6	0.845
788	5.21	34.51	0.30	3.02	500	7.40	34.56	0.30	2.94	27.04	111.4	0.963
983	4.36	34.55	0.54	3.02	600	6.27	34.52	0.25	2.96	27.16	100.0	1.068
1193	3.78	34.60	0.82	3.10	700	5.67	34.51	0.26	2.98	27.23	94.0	1.165
					800	5.15	34.51	0.30	3.02	27.29	88.4	1.257
					1000	4.29	34.55	0.56	2.99	27.42	76.7	1.422

140.80 BLACK DOUGLAS; November 21, 1950; 1528 GCT; 23°06'N, 115°31'W; sounding, 2,240 fm; wind, 320°, force 3; weather, partly cloudy; sea, very rough; wire angle, 15°.

0	22.47	34.25	2.59r	0.44	0	22.47	34.25	(3.15)	0.44	23.54	436.1	0.000
11	22.48	34.23	3.18	0.43	10	22.48	34.23	3.18	0.43	23.52	438.2	0.044
26	22.47	34.27	3.28	0.40	20	22.46	34.25	3.25	0.40	23.54	436.6	0.087
51	18.53	34.27	3.68	1.04	30	22.48	34.27	3.39	0.41	23.55	436.0	0.131
73	13.45	34.40	1.19	2.02	50	22.00	34.27	3.67	1.35	23.68	423.9	0.217
96	12.04	34.43	1.12	2.10	75	13.22	34.40	1.19	2.03	25.90	212.8	0.297
147	10.95	34.61	0.63	2.41	100	11.86	34.44	1.09	2.12	26.20	185.0	0.346
192	10.89	34.70	0.22	2.66	150	10.94	34.63	0.60	2.45	26.52	155.9	0.432
283	9.42	34.60	0.18	2.78	200	10.85	34.70	0.20	2.68	26.59	150.4	0.508
378	8.06	34.52	0.16	2.78	250	10.16	34.65	0.19	2.75	26.67	143.4	0.581
470	6.97	34.54	0.18	2.98	300	9.12	34.58	0.17	2.78	26.79	132.5	0.650
566	6.32	34.60	0.17	3.15	400	7.78	34.52	0.16	2.81	26.95	118.3	0.776
763	5.15	34.54	0.25	3.20	500	6.72	34.56	0.18	3.04	27.13	101.8	0.886
953	4.33	34.58	0.34	3.34	600	6.11	34.60	0.19	3.18	27.24	91.9	0.983
1155	3.68	34.61	0.57	3.31	700	5.46	34.56	0.23	3.20	27.29	87.6	1.072
					800	4.99	34.54	0.25	3.21	27.33	84.2	1.158
					1000	4.14	34.59	0.40	3.34	27.47	71.9	1.315

a) Alternate value, 2.59 μg at/L, not used in interpolation.
b) Alternate value, 2.35 μg at/L, not used in interpolation.
c) Alternate value, 2.85 μg at/L, not used in interpolation.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

BLACK DOUGLAS; November 21, 1950; 2212 GCT; 22°45'N, 116°10.5'W; sounding, 2,220 fm; wind, 330°, force 5; weather, cloudy; sea, very rough; wire angle, 30°. 140.90

0	22.10	34.27	5.11	0.48	0	22.10	34.27	5.11	0.48	23.66	424.7	0.000
9	22.08	34.27	4.63	0.40	10	22.08	34.27	4.63	0.40	23.66	424.5	0.042
22	22.17	34.33	4.99	0.47	20	22.17	34.32	4.98	0.42	23.67	423.7	0.085
48	16.50	34.34	3.25	1.49	30	22.17	34.34	4.99	0.77	23.69	422.6	0.127
69	13.76	34.34	1.90	2.02	50	16.35	34.34	3.10	1.56	25.18	281.2	0.198
96	11.04	34.18	0.71u	2.10u	75	12.95	34.33	1.65	2.09	25.90	212.7	0.259
144	11.28	34.56	0.76	2.61	100	10.99	34.18	1.10	2.32	26.16	188.8	0.309
190	10.47	34.65	0.52	2.74	150	11.28	34.59	0.73	2.63	26.42	164.8	0.398
283	9.06	34.51	0.39	2.88	200	10.32	34.64	0.49	2.76	26.64	145.7	0.475
381	7.76	34.51	0.31	2.85	250	9.51	34.54	0.42	2.84	26.70	140.7	0.547
473	6.83	34.51	0.25	2.94	300	8.83	34.51	0.39	2.88	26.78	133.1	0.615
565	6.17	34.51	0.23	3.08	400	7.52	34.51	0.28	2.86	26.98	115.2	0.740
747	4.93	34.56	0.37	3.12	500	6.62	34.51	0.25	2.99	27.11	104.1	0.849
930	4.42	34.54	0.36	3.16	600	5.93	34.52	0.24	3.10	27.20	95.4	0.949
1122	4.05	34.60	0.50	3.10	700	5.19	34.54	0.31	3.12	27.31	85.6	1.039
					800	4.73	34.56	0.37	3.13	27.38	79.4	1.123
					1000	4.28	34.55	0.38	3.15	27.42	76.6	1.278

BLACK DOUGLAS; November 22, 1950; 0424 GCT; 22°25.5'N, 116°47'W; sounding, 2,280 fm; wind, 350°, force 3; weather, cloudy; sea, rough; wire angle, 21°. 140.100

0	20.95	33.98	5.01	0.46	0	20.95	33.98	5.01	0.46	23.75	415.6	0.000
10	20.95	33.98	5.28	0.47	10	20.95	33.98	5.28	0.47	23.75	415.9	0.042
23	20.94	33.98	5.05	0.43	20	20.92	33.98	5.15	0.44	23.76	415.5	0.083
47	18.04	33.77	4.91	0.36	30	20.95	33.97	4.97	0.40	23.74	417.3	0.125
69	15.91	33.68	5.77	0.34a)	50	17.70	33.74	4.92	0.35	24.40	355.3	0.202
90	14.16	33.68	5.27	0.52	75	15.45	33.67	5.75	0.36	24.87	311.3	0.285
138	11.72	34.25	1.95	1.98	100	13.55	33.70	4.50	0.78	25.30	271.1	0.358
181	10.59	34.36	1.45	2.29	150	11.35	34.29	1.79	2.09	26.18	188.1	0.473
267	9.62	34.54	0.76	2.64	200	10.30	34.41	1.28	2.39	26.46	162.3	0.561
359	8.59	34.52	0.30	2.79	250	9.77	34.52	0.87	2.60	26.64	146.4	0.638
447	7.59	34.54	0.27	3.11	300	9.29	34.54	0.53	2.71	26.73	138.2	0.709
538	6.18	34.51	0.17	3.15	400	8.13	34.53	0.29	2.91	26.91	122.8	0.839
718	5.36	34.54	0.36	3.33	500	6.75	34.53	0.17	3.13	27.10	104.4	0.952
896	4.53	34.54	0.42	3.39	600	5.83	34.51	0.20	3.22	27.21	94.9	1.053
1095	3.88	34.54	0.65	3.44	700	5.42	34.54	0.32	3.32	27.28	88.5	1.144
					800	4.99	34.54	0.40	3.35	27.33	84.2	1.231
					1000	4.15	34.54	0.52	3.42	27.43	75.7	1.390

BLACK DOUGLAS; November 22, 1950; 1030 GCT; 22°05.5'N, 117°24.5'W; sounding, 2,200 fm; wind, 340°, force 3; weather, overcast; sea, rough; wire angle, 9°. 140.110

0	21.95	34.05	3.80	0.08r	0	21.95	34.05	3.80	(0.58)	23.53	436.6	0.000
10	21.96	34.09	3.86	0.56	10	21.96	34.09	3.86	0.56	23.56	434.4	0.044
25	21.95	34.09	3.77	0.50	20	21.94	34.09	3.81	0.52	23.56	434.2	0.087
49	19.08	33.73	4.43	0.50	30	21.93	34.08	3.75	0.49	23.56	435.0	0.130
73	16.43	33.69	4.35	0.62	50	19.00	33.73	4.42	0.50	24.07	386.7	0.213
98	14.31	33.69	3.63	0.50r	75	16.30	33.69	4.31	(0.64)	24.69	328.2	0.302
151	11.00	33.80	2.70	1.57	100	14.10	33.69	3.58	(0.88)	25.17	282.8	0.378
199	10.34	34.34	1.44	2.30	150	11.04	33.80	2.70	(1.55)	25.85	218.7	0.503
294	9.16	34.51	0.52	2.75	200	10.33	34.35	1.41	2.31	26.41	167.4	0.601
395	8.07	34.51	0.30	2.91	250	9.76	34.48	0.79	2.59	26.61	149.2	0.679
491	7.19	34.51	0.18	3.17	300	9.09	34.51	0.50	2.76	26.74	137.2	0.751
592	6.19	34.43	0.21	3.19	400	8.03	34.51	0.30	2.92	26.91	122.8	0.881
788	4.98	34.60	0.32	3.25	500	7.10	34.51	0.20	3.17	27.04	110.8	0.997
981	4.18	34.58	0.41	3.24	600	6.12	34.43	0.20	3.19	27.11	104.6	1.105
1184	3.60	34.58	0.59	3.24	700	5.45	34.53	0.24	3.22	27.27	89.7	1.202
					800	4.94	34.60	0.34	3.25	27.39	79.1	1.286
					1000	4.11	34.58	0.43	3.24	27.46	72.3	1.439

a) Alternate value, 0.46 μg at/L, not used in interpolation.

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
143.30	BLACK DOUGLAS; November 20, 1950; 0446 GCT; 24°11'N, 112°03'W; sounding, 120 fm; wind, 320°, force 3; weather, cloudy; sea, rough; wire angle, 20°.											
0	23.44	34.43	4.89	0.39	0	23.44	34.43	4.89	0.39	23.40	449.6	0.000
9	23.47	34.43	4.69	0.44	10	23.47	34.43	4.70	0.44	23.39	450.8	0.045
23	23.16	34.42	4.78	0.46	20	23.32	34.42	4.76	0.46	23.42	447.8	0.090
47	17.68	33.80	5.58	0.37	30	22.00	34.13	5.16	0.45	23.58	433.3	0.134
70	14.61	33.82	4.25	0.99	50	16.80	33.80	5.58	0.38	24.66	330.5	0.210
92	13.54	34.13	2.47	1.87	75	14.25	33.85	3.95	1.09	25.27	273.4	0.286
143	12.94	34.53	0.35	2.59	100	13.35	34.20	2.03	2.01	25.72	230.6	0.349
					150	(12.92)	(34.54)	(0.35)	(2.63)	(26.07)	(198.7)	(0.456)
143.35	BLACK DOUGLAS; November 20, 1950; 0020 GCT; 24°00'N, 112°20'W; sounding, 1,260 fm; wind, 320°, force 4; weather, partly cloudy; sea, moderate; wire angle, 22°.											
0	23.10	34.51	4.98	0.44	0	23.10	34.51	4.98	0.44	23.55	434.4	0.000
9	23.09	34.42	4.91	0.48	10	23.09	34.42	4.91	0.48	23.48	441.3	0.044
23	21.88	34.40	5.23	0.48	20	23.10	34.40	5.20	0.48	23.47	443.1	0.088
52	13.10	33.64	4.92	0.74	30	19.00	34.39	5.22	0.52	24.65	331.2	0.127
75	11.98	33.73	3.40	1.23	50	13.48	33.64	4.97	0.70	25.26	272.9	0.187
103	11.80	34.13	2.22	1.90	75	11.98	33.73	3.40	1.23	25.63	238.8	0.251
154	11.75	34.58	0.71	2.46	100	11.77	34.09	2.30	1.84	25.95	209.1	0.307
206	11.31	34.72	0.37	2.53	150	11.83	34.56	0.78	2.44	26.30	176.9	0.404
309	9.93	34.65	0.24	2.70	200	11.73	34.72	0.39	2.52	26.51	158.0	0.487
417	8.30	34.56	0.21	2.89	250	10.75	34.70	0.29	2.60	26.61	149.8	0.565
520	6.73	34.51	0.27u	2.87u	300	10.07	34.66	0.25	2.69	26.69	142.2	0.637
624	5.88	34.52	0.24	2.98	400	8.56	34.57	0.21	2.87	26.87	126.4	0.772
830	4.87	34.56	0.26	3.01	500	7.05	34.51	0.22	2.94	27.05	110.1	0.890
1035	3.96	34.60	0.62	2.96	600	6.02	34.52	0.24	2.98	27.19	96.6	0.993
1232	3.44	-	0.81	2.97	700	5.49	34.54	0.25	2.99	27.27	89.4	1.086
					800	5.01	34.56	0.26	3.00	27.35	83.0	1.172
					1000	4.11	34.59	0.51	2.97	27.47	71.6	1.327
143.40	BLACK DOUGLAS; November 19, 1950; 1944 GCT; 23°50'N, 112°39'W; sounding, 1,780 fm; wind, 330°, force 3; weather, partly cloudy; sea, rough; wire angle, 25°.											
0	23.01	34.25	4.64	0.63	0	23.01	34.25	4.64	0.63	23.38	450.8	0.000
9	22.96	34.25	4.19	0.56	10	22.96	34.25	4.20	0.56	23.40	449.8	0.045
22	22.92	34.25	4.24	0.61	20	22.93	34.25	4.24	0.61	23.41	449.3	0.090
45	16.35	33.66	4.83	0.59	30	20.80	34.24	4.52	0.61	23.99	393.9	0.132
68	13.97	33.68	4.41	0.89	50	15.78	33.66	4.81	0.60	24.79	318.4	0.203
89	12.13	33.71	3.32	1.35	75	13.25	33.69	4.14	1.05	25.35	265.4	0.276
139	12.74r	34.74	0.41	2.85	100	11.99	34.20	2.50	1.61	25.99	205.0	0.335
150p	12.29	34.70r	0.45r	3.21r	150	12.29	34.76	0.33	2.87	26.37	170.7	0.429
183	12.06	34.78	0.22	2.92	200	11.85	34.77	0.20	2.93	26.46	163.1	0.512
273p	10.75	34.71	0.19	2.98a)	250	11.15	34.73	0.20	2.96	26.56	154.6	0.591
363p	9.13	34.61	0.16	3.06	300	10.22	34.68	0.18	2.98	26.68	143.2	0.666
461p	7.91	34.54	0.17	3.08	400	8.63	34.58	0.16	3.07	26.87	126.8	0.802
664p	6.03	34.51	0.25	3.16	500	7.50	34.53	0.17	3.09	27.00	115.1	0.922
825p	4.96	34.54	0.27	3.16	600	6.54	34.51	0.21	3.14	27.12	104.4	1.032
1047p	4.09	34.58	0.47	3.24	700	5.78	34.51	0.26	3.17	27.21	95.5	1.132
					800	5.11	34.53	0.27	3.16	27.31	86.5	1.223
					1000	4.24	34.58	0.40	3.23	27.45	73.9	1.383

a) Alternate value, 2.79 μg at/L, not used in interpolation.

BLACK DOUGLAS; November 19, 1950; 1318 GCT; 23°31'N, 113°18'W; sounding, 1,780 fm; wind, 330°, force 2; weather, overcast; sea, rough; wire angle, 8°. 143.50

OBSERVED Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	INTERPOLATED Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	COMPUTED σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m
0	22.65	34.09	4.08	0.37	0	22.65	34.09	4.08	0.37	23.37	452.5	0.000
10	22.65	34.07	4.39	0.36	10	22.65	34.07	4.39	0.36	23.35	454.3	0.045
25	22.63	34.07	4.26	0.38	20	22.64	34.07	4.27	0.37	23.36	453.9	0.091
49	18.18	33.68	5.00	0.41	30	22.62	34.07	4.29	0.39	23.35	454.8	0.136
73	14.86	33.69	4.85	0.45	50	18.00	33.68	5.00	0.41	24.28	366.6	0.218
97	13.03	33.69	3.98	0.87	75	14.60	33.69	4.82	0.46	25.07	292.2	0.301
148	11.89	34.34	1.59a)	2.01b)	100	12.88	33.69	3.76	0.96	25.42	259.0	0.370
193	10.55	34.43	1.36	2.46	150	11.85	34.35	1.58	2.04	26.13	192.7	0.482
288	9.85	34.60	0.35	3.00	200	10.44	34.44	1.31	2.51	26.46	162.5	0.572
385	9.00	34.61	0.29	3.21	250	10.01	34.56	0.81	2.82	26.63	147.5	0.649
478	7.77	34.56	0.19	3.41	300	9.79	34.60	0.31	3.02	26.70	141.9	0.720
578	6.83	34.57	0.25	3.40	400	8.83	34.60	0.28	3.24	26.85	128.4	0.856
769	5.33	34.54	0.25	3.52	500	7.52	34.56	0.19	3.41	27.02	113.2	0.977
961	4.38	34.56	0.41	3.55	600	6.65	34.57	0.25	3.41	27.15	101.6	1.084
1163	3.69	34.58	0.75	3.41	700	5.82	34.56	0.25	3.48	27.25	92.3	1.181
					800	5.13	34.54	0.26	3.52	27.32	86.0	1.270
					1000	4.25	34.57	0.45	3.53	27.44	74.7	1.431

BLACK DOUGLAS; November 19, 1950; 0650 GCT; 23°10.5'N, 113°55.5'W; sounding, 2,120 fm; wind, 330°, force 3; weather, partly cloudy; sea, moderate; wire angle, 8°. 143.60

0	22.95	34.07	5.00	0.40	0	22.95	34.07	5.00	0.40	23.26	462.1	0.000
10	22.96	34.05	4.88	0.37	10	22.96	34.05	4.88	0.37	23.25	464.2	0.046
25	22.92	34.05	4.88	0.37	20	22.92	34.05	4.88	0.36	23.26	463.5	0.093
50	16.80	33.44	5.95	0.37	30	22.90	34.05	4.99	0.36	23.26	463.3	0.139
74	14.51	33.53	5.57	0.40	50	16.80	33.44	5.95	0.37	24.39	356.7	0.221
99	12.91	33.62	4.48	1.05	75	14.40	33.53	5.54	0.40	24.99	299.8	0.303
152	11.42	34.22	1.62	2.15	100	12.85	33.62	4.45	1.08	25.37	263.6	0.373
200	11.22	34.52	0.52	2.55	150	11.41	34.18	1.65	2.12	26.08	197.6	0.488
296	9.77	34.49	0.27	2.78	200	11.22	34.52	0.52	2.55	26.38	170.1	0.581
395	8.43	34.47	0.40u	2.82	250	10.42	34.51	0.32	2.69	26.52	158.1	0.663
491	7.31	34.43	0.24	2.92	300	9.72	34.49	0.27	2.78	26.62	148.9	0.739
590	6.54	34.46	0.17	3.08	400	8.35	34.47	0.26	2.82	26.83	130.5	0.879
788	5.24	34.47	0.52r	3.22	500	7.24	34.43	0.25	2.93	26.96	118.7	1.004
982	4.43	34.52	0.44	3.25	600	6.46	34.46	(0.17)	3.09	27.09	107.0	1.116
1186	3.78	34.52	0.61	3.15	700	5.78	34.47	(0.20)	3.17	27.18	98.4	1.219
					800	5.17	34.47	(0.26)	3.22	27.26	91.7	1.314
					1000	4.37	34.52	0.46	3.24	27.39	79.9	1.486

BLACK DOUGLAS; November 19, 1950; 0018 GCT; 22°50.5'N, 114°33'W; sounding, 2,060 fm; wind, 340°, force 4; weather, partly cloudy; sea, very rough; wire angle, 7°. 143.70

0	23.37	34.34	4.97	0.38	0	23.37	34.34	4.97	0.38	23.35	454.2	0.000
10	23.39	34.35	4.89	0.44	10	23.39	34.35	4.89	0.44	23.35	454.4	0.045
25	23.33	34.42	4.89	0.37	20	23.34	34.40	4.89	0.38	23.40	449.8	0.091
56	18.20	33.68	5.83	0.41	30	23.30	34.42	4.96	0.37	23.43	447.6	0.135
80	14.75	33.57	5.75	0.50	50	21.00	33.87	5.78	0.39	23.66	426.6	0.223
110	12.69	33.80	3.66	1.28	75	15.25	33.57	5.80	0.47	24.84	314.4	0.316
164	10.61	34.20	1.94	2.12	100	13.33	33.62	4.27	1.00	25.28	272.7	0.389
216	10.26	34.43	1.01	2.49	150	10.83	34.12	2.34	1.99	26.14	191.6	0.505
321	9.08	34.49	0.31	2.76	200	10.33	34.40	1.24	2.42	26.45	163.5	0.594
433	7.69	34.47	0.27	2.91	250	10.00	34.46	0.68	2.60	26.55	154.7	0.673
538	6.75	34.42	0.22	2.99	300	9.37	34.48	0.38	2.72	26.67	143.9	0.748
643	5.98	34.43	0.23	3.08	400	8.09	34.48	0.25	2.87	26.87	125.9	0.882
849	4.69	34.44	0.40	3.22	500	7.07	34.43	0.23	2.96	26.98	116.3	1.004
1060	4.00	34.51	0.54	3.18	600	6.28	34.42	0.22	3.04	27.08	107.5	1.116
1266	3.48	34.52	0.79	3.18	700	5.55	34.43	0.26	3.16	27.18	98.4	1.218
					800	4.94	34.44	0.35	3.21	27.26	90.9	1.313
					1000	4.15	34.48	0.51	3.21	27.38	80.2	1.484

a) Alternate value, 1.46 ml/L, not used in interpolation.
b) Alternate value, 2.23 μg at/L, not used in interpolation.

147.25 BLACK DOUGLAS; November 17, 1950; 1308 GCT; 23°46.5'N, 111°22.5'W; sounding, 240 fm; wind, 360°, force 4; weather, partly cloudy; sea, rough; wire angle, 2°.

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
0	24.15	34.45	4.19	0.41	0	24.15	34.45	4.19	0.41	23.20	468.1	0.000
10	24.16	34.47	4.47	0.43	10	24.16	34.47	4.47	0.44	23.21	467.3	0.047
25	-	34.47	4.16	0.49	20	24.14	34.47	4.29	0.47	23.22	467.1	0.094
50	16.06	33.83	-	0.67	30	23.00	34.46	4.11	0.52	23.55	436.5	0.139
74	14.20	33.91	3.84	1.22	50	16.06	33.83	3.94	0.67	24.85	312.0	0.213
98	13.35	34.03	2.66	1.86	75	14.20	33.91	3.85	1.23	25.32	268.0	0.286
150	12.19	34.64	0.55	2.58a)	100	13.32	34.05	2.40	1.91	25.61	241.0	0.350
198	11.78	34.73	0.27	2.89b)	150	12.19	34.64	0.55	2.58	26.29	177.6	0.454
246	11.24	34.76	0.14	2.90	200	11.75	34.73	0.26	2.89	26.45	164.2	0.540
296	10.58	34.72	0.17	2.75r	250	11.18	34.76	0.14	(2.90)	26.57	152.9	0.619
					300	(10.55)	(34.72)	(0.17)		(26.66)	(146.0)	(0.694)

147.30 BLACK DOUGLAS; November 17, 1950; 1643 GCT; 23°35'N, 111°42.5'W; sounding, 220 fm; wind, 340°, force 3; weather, partly cloudy; sea, moderate; wire angle, 7°.

0	23.89	34.49	5.08	0.45	0	23.89	34.49	5.08	0.45	23.31	457.9	0.000
10	23.87	34.45	4.18	0.55	10	23.87	34.45	4.18	0.55	23.28	460.6	0.046
25	-	34.45	3.62	0.62	20	23.87	34.45	3.67	0.60	23.28	461.0	0.092
49	16.18	33.68	3.77	0.56	30	23.86	34.45	3.62	0.61	23.29	461.1	0.138
73	13.99	33.86	3.58	1.24	50	16.16	33.68	3.76	0.57	24.71	325.6	0.217
97	13.04	34.32	0.54	2.20	75	13.95	33.90	3.54	1.33	25.37	263.7	0.290
148	11.90	34.74	0.27	2.89	100	12.95	34.37	0.50	2.27	25.93	210.4	0.350
196	11.30	34.74	0.39	3.02	150	11.84	34.76	0.27	2.90	26.45	162.4	0.443
244	10.77	34.52r	0.15	3.02	200	11.26	34.73	0.38	3.03	26.53	156.1	0.522
293	10.26	34.67	0.22	3.01u	250	10.72	34.70	0.15	(3.02)	26.61	149.3	0.597
					300	(10.20)	(34.68)	(0.23)		(26.69)	(142.9)	(0.670)

147.40 BLACK DOUGLAS; November 17, 1950; 2302 GCT; 23°16'N, 112°19'W; sounding, 1,880 fm; wind, 320°, force 4; weather, clear; sea, rough; wire angle, 20°.

0	24.51	34.52	4.90	0.45	0	24.51	34.52	4.90	0.45	23.15	473.3	0.000
9	24.51	34.63	4.76	0.51	10	24.51	34.63	4.78	0.51	23.23	465.7	0.047
23	-	34.56	4.85	0.50	20	24.50	34.57	4.82	0.50	23.19	470.2	0.094
46	15.84	33.75	5.46	0.60	30	24.53	34.27	5.05	0.51	22.95	493.0	0.142
69	12.97	33.89	3.07	1.62	50	14.00	33.75	5.45	0.68	25.24	275.0	0.219
81p	12.92	34.29r	1.85	2.08	75	12.95	33.96	2.15	1.88	25.62	239.9	0.283
92	12.04	34.25	1.83	2.12	100	12.04	34.33	1.80	2.23	26.08	196.4	0.338
190p	11.62	34.74	0.40	2.78	150	12.04	34.67	1.13	2.56	26.34	172.6	0.430
291p	10.25	34.72	0.28	2.94	200	11.48	34.76	0.37	2.80	26.52	157.1	0.512
383p	8.74	34.58	0.27	2.99	250	10.80	34.76	0.32	2.89	26.64	146.2	0.588
478p	7.67	34.52	0.16	2.95r	300	10.11	34.71	0.27	2.94	26.73	139.2	0.659
698p	5.65	34.60	0.25	3.36	400	8.50	34.56	0.24	(3.00)	26.87	126.2	0.792
887p	4.50	34.56	0.36	3.47	500	7.46	34.52	0.16	(3.11)	27.00	115.3	0.913
1085p	3.84	34.58	0.56	3.31	600	6.50	34.56	0.19	(3.24)	27.16	100.2	1.021
					700	5.63	34.60	0.25	3.36	27.30	86.8	1.114
					800	4.93	34.59	0.28	3.44	27.38	79.7	1.197
					1000	4.08	34.56	0.46	3.41	27.45	73.4	1.350

a) Alternate value, 2.28 μg at/L, not used in interpolation.
b) Alternate value, 2.46 μg at/L, not used in interpolation.

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

BLACK DOUGLAS; November 18, 1950; 0432 GCT; 22°56'N, 112°56.5'W; sounding, 1,740 fm; wind, 320°, force 3; weather, clear; sea, rough; wire angle, 16°. 147.50

0	23.89	34.54	4.93	0.43	0	23.89	34.54	4.93	0.43	23.35	454.3	0.000
10	23.91	34.49	4.77	0.43	10	23.91	34.49	4.77	0.43	23.30	458.8	0.046
24	23.65	34.43	4.85	0.40	20	23.75	34.44	4.81	0.41	23.31	458.3	0.092
48	18.34	33.84	5.88	0.46	30	23.59	34.40	5.09	0.41	23.33	457.1	0.137
72	14.86	33.78	5.08	0.80	50	18.00	33.81	5.88	0.47	24.38	357.2	0.219
96	13.45	34.25	2.16	1.96	75	14.64	33.78	4.90	1.30	25.13	286.4	0.299
147	11.87	34.56	0.87	2.35	100	13.25	34.31	2.01	2.02	25.83	220.6	0.362
192	11.49	34.74	0.36	2.63	150	11.85	34.59	0.81	2.37	26.32	175.0	0.461
283	9.94	34.67	0.18	2.64	200	11.37	34.74	0.31	2.63	26.52	156.6	0.544
379	8.56	34.52	0.18	2.84	250	10.52	34.70	0.19	2.64	26.65	145.8	0.620
470	7.57	34.51	0.20	2.94	300	9.68	34.64	0.16	2.66	26.74	137.2	0.691
567	6.70	34.52	0.18	3.06	400	8.32	34.51	0.19	2.87	26.86	127.1	0.822
759	5.43	34.56	0.23	3.08	500	7.28	34.51	0.19	2.98	27.01	113.4	0.942
951	4.52	34.58	0.33	3.26	600	6.44	34.52	0.18	3.08	27.14	102.3	1.051
1152	3.82	34.65	0.63	3.11	700	5.75	34.54	0.20	3.08	27.24	92.9	1.148
					800	5.24	34.57	0.26	3.10	27.33	85.2	1.238
					1000	4.32	34.59	0.38	3.25	27.45	74.1	1.397

BLACK DOUGLAS; November 18, 1950; 1113 GCT; 22°36'N, 113°33.5'W; sounding, 2,120 fm; wind, 320°, force 4; weather, clear; sea, rough; wire angle, 19°. 147.60

0	22.99	34.21	4.81r	0.36	0	22.99	34.21	(4.06)	0.36	23.36	453.1	0.000
9	23.00	34.23	4.12	0.35	10	23.00	34.23	4.14	0.35	23.37	452.3	0.045
23	23.00	34.16	4.25	0.46	20	23.00	34.19	4.23	0.46	23.34	455.6	0.091
46	18.20	33.80	4.42	0.35	30	23.00	34.05	4.32	0.44	23.24	466.1	0.137
69	14.86	33.78	4.38	0.63	50	16.53	33.79	4.41	0.37	24.72	324.6	0.216
92	13.70	33.78	3.47	0.97	75	14.48	33.78	4.29	0.71	25.16	283.2	0.292
141	12.63	34.61	0.70	2.41	100	13.50	33.79	2.07	1.60	25.38	263.6	0.360
186	11.91	34.78	0.25	2.59	150	12.47	34.70	0.57	2.46	26.28	178.4	0.470
277	10.60	34.72	0.17	2.76	200	11.68	34.78	0.20	2.63	26.50	159.2	0.555
370	9.26	34.67	0.25	2.81	250	10.98	34.74	0.15	2.73	26.60	150.8	0.632
461	8.00	34.60	0.18	2.90	300	10.27	34.70	0.19	2.77	26.69	142.6	0.706
556	6.98	34.51	0.17	2.97	400	8.84	34.65	0.24	2.84	26.89	124.9	0.839
743	5.53	34.52	0.36	3.04	500	7.55	34.56	0.17	2.93	27.02	113.6	0.958
929	4.66	34.57	0.36	3.20	600	6.57	34.51	0.20	3.00	27.11	104.9	1.068
1132	3.97	34.60	0.53	3.18	700	5.81	34.52	0.31	3.03	27.22	95.1	1.168
					800	5.23	34.53	0.36	3.08	27.30	88.0	1.259
					1000	4.40	34.59	0.39	3.20	27.44	75.1	1.423

BLACK DOUGLAS; November 18, 1950; 1728 GCT; 22°17'N, 114°14'W; sounding, 2,140 fm; wind, 320°, force 4; weather, clear; sea, rough; wire angle, 4°. 147.70

0	23.41	34.43	3.84	0.35	0	23.41	34.43	3.84	0.35	23.40	448.8	0.000
10	23.40	34.43	4.50	0.34	10	23.40	34.43	4.50	0.34	23.41	448.9	0.045
26	23.30	34.45	4.18	0.34	20	23.32	34.44	4.25	0.34	23.44	446.3	0.090
51	18.81	34.13	4.80	0.42	30	23.30	34.44	4.22	0.35	23.44	446.2	0.134
75	14.37	33.64	4.62	0.50	50	19.85	34.13	4.80	0.42	24.16	378.6	0.217
99	13.23	33.84	3.95	0.94	75	14.37	33.64	4.62	0.50	25.08	291.2	0.300
152	11.19	34.16	1.78	1.99a)	100	13.21	33.85	3.94	0.97	25.48	253.9	0.369
199	10.44	34.42	1.21	2.37	150	11.25	34.15	1.80	1.97	26.09	196.6	0.481
295	9.55	34.61	0.37	2.68b)	200	10.42	34.43	1.18	2.37	26.45	162.8	0.571
395	8.29	34.51	0.30	2.81	250	9.76	34.56	0.68	2.56	26.67	143.3	0.647
491	7.30	34.54	0.24	2.92	300	9.20	34.61	0.35	2.68	26.80	131.6	0.716
591	6.34	34.51	0.24	3.05	400	8.25	34.51	0.30	2.81	26.87	126.1	0.845
789	5.02	34.52	0.36	3.45r	500	7.22	34.54	0.25	2.93	27.05	110.3	0.963
986	4.25	34.60	0.59	3.10	600	6.27	34.51	0.25	(3.05)	27.15	100.7	1.068
1189	3.64	34.61	0.78	3.01	700	5.52	34.51	0.29	(3.06)	27.25	92.1	1.165
					800	4.98	34.52	0.36	(3.07)	27.32	85.5	1.254
					1000	4.19	34.60	0.61	3.10	27.47	71.8	1.411

a) Alternate value, 1.83 μg at/L, not used in interpolation.
b) Mean value of 2.58 and 2.78 μg at/L.

SIO

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	µg at/L	m	°C	‰	ml/L	µg at/L	g/L	$10^5 cm^3/g$	dyn. m

150.25 BLACK DOUGLAS; November 25, 1950; 0619 GCT; 23°12'N, 111°01.5'W; sounding, 720 fm; wind, 340°, force 3; weather, partly cloudy; sea, rough; wire angle, 9°.

0	24.40	-	4.49	0.44	0	24.40		4.49	0.44			
10	24.40	-	4.65	0.40	10	24.40		4.65	0.40			
26	24.40	-	4.58	0.42	20	24.40		4.61	0.42			
50	18.32	-	5.49	0.43	30	24.40		4.57	0.42			
74	14.02	-	4.07	1.17	50	18.32		5.49	0.43			
98	12.71	-	2.27	1.89	75	14.00		4.00	1.20			
150	-	34.61	0.62	2.63a)	100	12.65		2.20	1.90			
197	11.34	34.67	0.24	2.79	150	11.88	34.61	0.62	2.63	26.33	174.3	
293	10.11	34.67	0.15	2.85	200	11.32	34.67	0.23	2.79	26.48	160.8	
393	8.59	34.58	0.21	3.03	250	10.70	34.68	0.17	2.84	26.60	150.4	
488	7.50	34.52	0.19	3.19	300	10.01	34.67	0.15	2.86	26.71	140.6	
589	6.60	34.51	0.19	3.23	400	8.50	34.57	0.20	3.04	26.88	125.6	
785	5.11	34.51	0.28	3.20	500	7.40	34.52	0.20	3.20	27.01	114.4	
978	4.42	34.58	0.40	3.18b)	600	6.50	34.51	0.20	3.22	27.12	104.1	
1180	3.70	34.58	0.63	3.35	700	5.68	34.51	0.25	3.21	27.23	94.3	
					800	5.03	34.51	0.28	3.20	27.31	87.1	
					1000	4.35	34.58	0.41	3.18	27.44	75.5	

150.30 BLACK DOUGLAS; November 25, 1950; 0155 GCT; 23°02'N, 111°20'W; sounding, 1,520 fm; wind, 340°, force 4; weather, partly cloudy; sea, rough; wire angle, 7°.

0	24.30	34.42	4.19	0.34	0	24.30	34.42	4.19	0.34	23.14	474.5	0.000
10	24.34	34.41	4.08	0.36	10	24.34	34.41	4.08	0.36	23.12	476.8	0.048
24	24.29	34.43	4.19	0.34	20	24.32	34.43	4.15	0.34	23.14	475.1	0.095
49	17.35	33.71	4.96	0.50	30	24.30	34.43	4.30	0.36	23.14	474.9	0.143
74	13.61	33.66	4.04	0.96	50	17.35	33.70	4.96	0.50	24.45	350.2	0.225
97	12.08	33.82	2.69	1.57	75	13.61	33.66	3.98	0.98	25.25	274.6	0.303
149	12.11	34.56	0.66	2.64	100	12.25	33.92	2.50	1.66	25.72	230.3	0.366
195	11.52	34.69	0.25	2.79	150	12.10	34.57	0.64	2.65	26.26	181.1	0.469
289	10.37	34.65	0.21	2.96	200	11.45	34.69	0.25	2.80	26.47	161.7	0.555
387	8.92	34.60	0.18	2.90	250	10.86	34.68	0.21	2.90	26.57	153.1	0.633
481	7.68	34.51	0.15	3.09	300	10.24	34.64	0.20	2.96	26.65	146.5	0.709
580	6.72	34.51	0.19	3.23	400	8.68	34.59	0.17	2.91	26.87	126.8	0.845
769	5.39	34.51	0.23	3.28	500	7.47	34.51	0.15	3.12	26.99	116.2	0.966
966	4.40	34.58	0.37	3.25	600	6.56	34.51	0.20	3.24	27.11	104.7	1.077
1165	3.78	34.70	0.64	3.39	700	5.85	34.51	0.21	3.26	27.21	96.4	1.177
					800	5.21	34.52	0.25	3.26	27.29	88.5	1.269
					1000	4.27	34.60	0.40	3.26	27.46	72.8	1.432

150.40 BLACK DOUGLAS; November 24, 1950; 1921 GCT; 22°42'N, 111°57.5'W; sounding, 1,780 fm; wind, 340°, force 4; weather, cloudy; sea, rough; wire angle, 16°.

0	24.07	3.98	0.48	0	24.07	3.98	0.48	
10	24.06	4.53	0.48	10	24.06	4.53	0.48	
24	24.02	4.28	0.38	20	24.02	4.30	0.44	
47	17.86	5.44	0.38	30	24.02	4.40	0.37	
70	14.40	4.74	0.56	50	16.65	5.42	0.38	
93	12.72	2.73	1.63	75	14.00	4.30	0.79	
143	12.27	0.86	2.32	100	12.55	2.20	1.78	
190	11.82	0.33	2.53	150	12.23	0.76	2.37	
280	10.45	0.20	2.61	200	11.67	0.30	2.54	
376	9.02	0.15	2.68	250	10.93	0.20	2.60	
467	7.50	0.15	2.73	300	10.10	0.18	2.63	
564	6.52	0.20	2.89	400	8.61	0.15	2.68	
754	5.20	0.27	2.96	500	7.09	0.15	2.78	
943	4.30	0.41	2.99	600	6.25	0.23	2.92	
1143	3.64	0.67	2.89	700	5.56	0.27	2.95	
				800	4.95	0.28	2.96	
				1000	4.08	0.50	2.98	

a) Alternate value, 2.78 µg at/L, not used in interpolation.
b) Alternate value, 3.08 µg at/L, not used in interpolation.

BLACK DOUGLAS; November 24, 1950; 1205 GCT; 22°22'N, 112°35'W; sounding, 1,940 fm; wind, 320°, force 1; weather, cloudy; sea, rough; wire angle, 4°. 150.50

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
0	24.09	34.47	4.87	0.62	0	24.09	34.47	4.87	0.62	23.23	465.0	0.000
10	24.11	34.46	4.12	0.37	10	24.11	34.46	4.12	0.37	23.22	466.6	0.047
25	24.10	34.49	3.66	0.42	20	24.10	34.48	3.71	0.40	23.24	465.3	0.093
49	18.11	33.69	5.00	0.42	30	24.10	34.49	3.67	0.42	23.25	464.9	0.140
73	14.42	33.69	4.09	-	50	18.11	33.68	5.00	0.42	24.26	369.2	0.223
98	13.02	34.09	2.23	1.69	75	14.25	33.70	3.97	1.12	25.15	284.4	0.305
152	11.93	34.59	0.77	2.36	100	12.95	34.16	2.15	1.74	25.77	225.8	0.369
200	13.65	34.63	0.39	2.52	150	11.97	34.58	0.80	2.35	26.29	178.0	0.469
296	9.74	34.65	0.21	2.71	200	11.15	34.63	0.39	2.52	26.48	160.8	0.554
397	8.45	34.51	0.27	2.76	250	10.38	34.65	0.25	2.63	26.63	147.1	0.631
494	7.38	34.50	0.20	-	300	9.69	34.65	0.22	2.71	26.75	136.6	0.702
594	6.59	34.49	0.18	2.96	400	8.40	34.51	0.27	2.76	26.85	128.4	0.834
792	5.11	34.51	0.30	-	500	7.33	34.50	0.20	2.84	27.00	114.9	0.956
986	4.23	34.52	0.46	3.18	600	6.55	34.49	0.18	(2.96)	27.10	106.1	1.066
1190	3.62	34.60	0.68	3.12	700	5.77	34.50	0.23	(3.04)	27.21	96.1	1.167
					800	5.06	34.51	0.32	(3.12)	27.30	87.3	1.259
					1000	4.18	34.52	0.47	3.18	27.41	77.6	1.424

BLACK DOUGLAS; November 24, 1950; 0558 GCT; 22°02'N, 113°12'W; sounding, 2,020 fm; wind, 320°, force 2; weather, partly cloudy; sea, rough; wire angle, 2°. 150.60

0	23.98	34.43	4.71	0.46	0	23.98	34.43	4.71	0.46	23.24	464.7	0.000
10	24.00	34.42	4.77	0.43	10	24.00	34.42	4.77	0.43	23.22	466.4	0.047
25	24.00	34.43	4.22	0.43	20	24.00	34.43	4.26	0.43	23.23	466.1	0.093
49	19.79	33.82	5.13	0.38	30	24.00	34.43	4.23	0.42	23.23	466.4	0.140
74	14.84	33.84	4.22	1.01	50	19.77	33.82	5.13	0.38	23.94	399.6	0.226
98	13.47	34.10	2.32	1.68	75	14.82	33.84	4.18	1.02	25.13	286.2	0.312
150	12.31	34.60	0.60	2.32	100	13.40	34.15	2.25	1.73	25.67	235.3	0.377
199	11.00	34.54	0.57	2.34	150	12.31	34.60	0.60	2.32	26.24	182.8	0.481
294	9.63	34.55	0.30	2.56	200	11.00	34.54	0.57	2.34	26.44	164.7	0.569
395	8.50	34.54	0.22	2.72	250	10.20	34.54	0.47	2.44	26.58	152.1	0.648
491	7.46	34.49	0.18	2.80	300	9.57	34.55	0.29	2.57	26.69	142.0	0.721
591	6.48	34.51	0.23	2.85	400	8.46	34.54	0.22	2.73	26.86	127.1	0.855
788	5.18	34.51	0.30	2.88	500	7.36	34.49	0.17	2.80	26.99	116.0	0.977
982	4.37	34.54	0.47	2.95	600	6.39	34.51	0.25	2.85	27.14	102.4	1.086
1186	3.74	34.54	0.66	2.84	700	5.70	34.51	0.29	2.87	27.22	94.4	1.185
					800	5.13	34.51	0.30	2.89	27.29	88.2	1.276
					1000	4.30	34.54	0.50	2.95	27.41	77.6	1.442

BLACK DOUGLAS; November 23, 1950; 2358 GCT; 21°41'N, 113°49'W; sounding, 2,020 fm; wind, 320°, force 2; weather, cloudy; sea, rough; wire angle, 5°. 150.70

0	23.25	34.20	4.93	0.40	0	23.25	34.20	4.93	0.40	23.28	461.0	0.000
10	23.18	34.20	4.80	0.45	10	23.18	34.20	4.80	0.45	23.30	459.4	0.046
25	23.57	34.47	4.73	0.32	20	23.50	34.46	4.72	0.36	23.40	449.9	0.092
49	19.54	34.02	5.46	0.35	30	23.53	34.47	4.76	0.32	23.40	450.4	0.136
74	16.42	33.82	5.36	0.44	50	19.52	34.02	5.45	0.35	24.15	378.9	0.219
98	13.98	33.72	5.04	0.54	75	16.40	33.81	5.30	0.45	24.76	322.1	0.307
151	11.28	34.13	2.16	1.95	100	13.90	33.72	5.00	0.56	25.24	276.6	0.382
197	10.80	34.42	1.22	2.21	150	11.29	34.12	2.20	1.95	26.06	199.4	0.501
294	9.72	34.47	0.41	2.54	200	10.75	34.42	1.16	2.23	26.39	169.2	0.593
395	8.45	34.51	0.30	2.67	250	10.25	34.45	0.63	2.42	26.50	159.6	0.675
490	7.45	34.46	0.24	2.78	300	9.66	34.47	0.40	2.55	26.62	149.4	0.752
590	6.50	34.51	0.25	2.87	400	8.39	34.51	0.30	2.67	26.85	128.2	0.890
788	5.19	34.45	0.33	2.96	500	7.35	34.46	0.25	2.79	26.97	118.1	1.014
983	4.40	34.52	0.46	2.83u	600	6.43	34.51	0.25	2.88	27.13	102.9	1.125
1183	3.74	34.60	0.70	2.98	700	5.72	34.49	0.27	2.94	27.21	96.2	1.224
					800	5.12	34.45	0.34	2.96	27.25	92.5	1.318
					1000	4.33	34.53	0.48	2.96	27.40	78.7	1.490

S10

CCOFI 5011

OBSERVED					INTERPOLATED					COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m

150.80 BLACK DOUGLAS; November 23, 1950; 1825 GCT; 21°21'N, 114°26'W; sounding, 2,000 fm; wind, calm; weather, cloudy; sea, rough; wire angle, 5°.

0	24.08	34.69	3.90r	0.33	0	24.08	34.69	(4.32)	0.33	23.40	448.8	0.000
10	24.07	34.69	4.42	0.30	10	24.07	34.69	4.42	0.30	23.41	448.9	0.045
25	24.05	34.69	4.46	0.29	20	24.08	34.69	4.45	0.29	23.40	449.6	0.090
49	23.91	34.66	4.44	0.30	30	24.03	34.69	4.45	0.29	23.42	448.6	0.135
73	18.19	33.98	5.36	0.30	50	23.91	34.66	4.44	0.30	23.43	448.1	0.224
97	16.40	33.94	4.39	0.35a)	75	17.75	33.97	5.33	0.30	24.56	340.5	0.323
151	12.15	34.12	2.17	1.70	100	16.30	33.94	4.25	0.36	24.88	310.7	0.404
198	11.26	34.47	1.03	2.39	150	12.16	34.12	2.19	1.66	25.90	215.0	0.536
294	9.80	34.55	0.40	2.62	200	11.24	34.48	1.02	2.40	26.35	173.4	0.633
394	8.29	34.52	0.32	2.86	250	10.40	34.53	0.52	2.55	26.54	156.2	0.716
489	7.21	34.51	0.27	2.94	300	9.70	34.55	0.38	2.64	26.67	144.1	0.790
588	6.54	34.52	0.17	3.09	400	8.22	34.52	0.30	2.87	26.88	124.9	0.925
785	5.38	34.55	0.27	3.14	500	7.08	34.51	0.27	2.95	27.04	110.5	1.043
978	4.45	34.58	0.45	3.14	600	6.50	34.52	0.17	3.10	27.13	103.2	1.149
1180	3.78	34.58	0.67	3.12	700	5.96	34.54	0.20	3.12	27.22	95.7	1.249
					800	5.29	34.55	0.30	3.14	27.31	87.3	1.340
					1000	4.37	34.58	0.48	3.14	27.43	75.5	1.503

150.90 BLACK DOUGLAS; November 23, 1950; 1205 GCT; 21°01'N, 115°03'W; sounding, 2,000 fm; wind, 310°, force 1; weather, overcast; sea, rough; wire angle, 0°.

0	23.10	34.36	5.06	0.36	0	23.10	34.36	5.06	0.36	23.44	445.3	0.000
10	23.10	34.29	4.63	0.29	10	23.10	34.29	4.63	0.29	23.39	450.7	0.045
25	23.11	34.29	4.55	0.33	20	23.10	34.28	4.57	0.31	23.38	451.8	0.090
50	22.83	34.34	4.27	0.33	30	23.10	34.30	4.52	0.33	23.40	450.8	0.135
74	19.00	34.23	4.93	0.39	50	22.83	34.34	4.27	0.33	23.50	441.2	0.224
98	16.19	33.95	4.85	0.47	75	19.00	34.20	4.93	0.39	24.43	353.5	0.324
152	12.49	34.02	4.17	1.66	100	16.18	33.95	4.82	0.50	24.92	307.4	0.406
199	11.29	34.50	0.97	2.45	150	12.55	34.02	4.18	1.62	25.74	229.8	0.540
294	9.81	34.52	0.46	2.67	200	11.29	34.50	0.97	2.45	26.35	172.8	0.641
395	8.40	34.49	0.32	2.80	250	10.42	34.53	0.60	2.59	26.53	156.6	0.724
490	7.26	34.45	0.27	2.97	300	9.75	34.52	0.43	2.68	26.64	147.2	0.799
591	6.52	34.48	0.23	3.00	400	8.34	34.49	0.30	2.80	26.84	128.9	0.937
788	5.27	34.49	0.26	3.10	500	7.17	34.45	0.27	2.98	26.98	116.3	1.060
982	4.36	34.51	0.45	3.14	600	6.46	34.48	0.24	3.00	27.10	105.6	1.171
1184	3.77	34.57	0.81	3.03	700	5.81	34.49	0.23	3.02	27.20	97.4	1.272
					800	5.19	34.49	0.27	3.11	27.27	90.4	1.366
					1000	4.28	34.51	0.47	3.14	27.39	79.5	1.536

150.100 BLACK DOUGLAS; November 23, 1950; 0624 GCT; 20°41'N, 115°40'W; sounding, 2,160 fm; wind, 270°, force 1; weather, cloudy; sea, moderate; wire angle, 0°.

0	23.81	34.61	3.89	0.34	0	23.81	34.61	3.89	0.34	23.42	447.0	0.000
10	23.80	34.61	3.92	0.39	10	23.80	34.61	3.92	0.39	23.43	447.0	0.045
25	23.82	34.63	4.25	0.34	20	23.81	34.62	4.24	0.36	23.43	447.0	0.089
50	23.69	34.69	4.06	0.34	30	23.82	34.64	4.22	0.33	23.44	446.2	0.134
75	18.91	34.34	4.73	0.40	50	23.69	34.69	4.06	0.34	23.52	439.8	0.223
99	16.78	34.22	4.38	0.37	75	18.91	34.34	4.73	0.40	24.57	340.4	0.320
152	12.40	33.93	2.91	1.40	100	16.78	34.21	4.37	0.37	24.98	301.7	0.400
200	11.33	34.45	0.94	2.37	150	12.50	33.93	2.97	1.34	25.68	235.5	0.535
297	9.88	34.67	0.28	2.76	200	11.33	34.45	0.94	2.37	26.31	177.2	0.638
397	8.39	34.54	0.25	2.91	250	10.51	34.63	0.48	2.61	26.59	150.8	0.720
493	7.29	34.51	0.23	3.09	300	9.85	34.67	0.28	2.76	26.74	137.8	0.792
594	6.40	34.54	0.19	3.12	400	8.36	34.54	0.25	2.92	26.88	125.5	0.924
791	5.15	34.56	0.29	3.15	500	7.24	34.51	0.23	3.09	27.02	112.8	1.043
986	4.34	34.58	0.49	3.24	600	6.35	34.54	0.20	3.12	27.17	99.6	1.149
1188	3.68	34.65	0.70	3.16	700	5.64	34.56	0.22	3.14	27.27	89.9	1.244
					800	5.10	34.56	0.30	3.16	27.34	84.1	1.331
					1000	4.29	34.58	0.50	3.24	27.44	74.5	1.489

a) Alternate value, 0.56 μg at/L, not used in interpolation.

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

BLACK DOUGLAS; November 23, 1950; 0015 GCT; 20°21'N, 116°17'W; sounding, 2,200 fm; wind, 270°, force 2; weather, overcast; sea, rough; wire angle, 3°. 150.110

0	23.99	34.67	4.59	0.37	0	23.99	34.67	4.59	0.37	23.42	447.7	0.000
10	23.88	34.69	4.34	0.33	10	23.88	34.69	4.34	0.33	23.46	443.5	0.045
25	23.88	34.65	4.84	0.34	20	23.88	34.66	4.82	0.34	23.44	446.1	0.089
50	23.86	34.69	4.46	0.33	30	23.87	34.65	4.82	0.33	23.44	446.9	0.134
74	20.53	34.42	4.92	0.28	50	23.86	34.69	4.46	0.33	23.47	444.5	0.223
99	18.27	34.27	5.07	0.44	75	20.51	34.41	4.93	0.28	24.19	376.3	0.325
151	12.72	34.09	2.61	1.70	100	18.27	34.25	5.05	0.44	24.65	333.2	0.414
199	11.52	34.54	0.91	2.38	150	12.74	34.09	2.64	1.69	25.76	227.9	0.554
294	9.87	34.61	0.36	2.68	200	11.50	34.54	0.90	2.39	26.34	174.0	0.655
394	8.35	34.58	0.27	2.84	250	10.63	34.61	0.54	2.57	26.56	154.3	0.736
488	7.10	34.52	0.25	2.95	300	9.77	34.61	0.35	2.69	26.71	140.9	0.811
590	6.20	34.54	0.25	3.02	400	8.25	34.58	0.28	2.85	26.93	120.9	0.942
789	5.11	34.52	0.30	3.32	500	6.98	34.52	0.25	2.96	27.06	108.4	1.056
983	4.34	34.60	0.52	3.32	600	6.13	34.54	0.25	3.03	27.19	96.6	1.159
1186	3.65	34.60	0.84	3.32	700	5.52	34.53	0.25	3.16	27.26	90.6	1.252
					800	5.05	34.52	0.30	3.32	27.31	86.4	1.341
					1000	4.28	34.60	0.53	3.32	27.46	72.9	1.500

BLACK DOUGLAS; November 25, 1950; 1256 GCT; 22°47.5'N, 110°22'W; sounding, 740 fm; wind, 320°, force 2; weather, partly cloudy; sea, rough; wire angle, 26°. 153.20

0	25.64	34.74	4.51	0.49	0	25.64	34.74	4.51	0.49	22.97	490.2	0.000
9	-	34.75	4.64	0.46	10	25.64	34.75	4.64	0.46	22.98	489.9	0.049
23	24.04	34.33	4.76	0.45	20	25.00	34.44	4.73	0.45	22.94	493.9	0.098
45	17.07	33.67	5.62	0.54	30	22.00	33.96	5.15	0.47	23.45	445.6	0.145
68	14.50	33.66	5.12	0.78	50	16.55	33.66	5.61	0.58	24.61	335.1	0.223
87	13.16	33.71	4.13	1.16	75	13.90	33.66	4.83	0.90	25.19	280.3	0.300
136	12.45	34.43	1.09	2.42	100	12.85	33.88	2.67	1.84	25.58	244.5	0.366
175	11.84	34.67	0.40	2.68a)	150	12.25	34.64	0.74	2.54	26.28	178.7	0.471
253	10.65	34.65	0.33	2.90	200	11.38	34.67	0.31	2.77	26.47	161.9	0.557
334	9.75	34.64	0.23	2.96	250	10.69	34.65	0.33	2.89	26.58	152.4	0.635
413	8.35	34.54	0.20	3.04b)	300	10.10	34.64	0.28	2.93	26.67	144.2	0.710
490	7.17	34.52	0.22	3.32	400	8.61	34.55	0.20	3.02	26.85	128.7	0.845
651	5.90	34.47	0.22	3.41	500	7.08	34.52	0.21	3.33	27.05	109.8	0.964
816	5.11	34.52	0.28	3.53	600	6.27	34.48	0.21	3.38	27.13	103.0	1.071
994	4.30	34.43	0.43	3.60	700	5.62	34.48	0.23	3.45	27.21	95.6	1.170
					800	5.17	34.51	0.27	3.52	27.29	88.7	1.262
					1000	(4.28)	(34.43)	(0.44)	(3.60)	(27.33)	(85.4)	(1.437)

BLACK DOUGLAS; November 25, 1950; 1926 GCT; 22°27'N, 110°59'W; sounding, 1,660 fm; wind, 350, force 2; weather, cloudy; sea, rough; wire angle, 14°. 153.30

0	25.22	34.52	4.41	0.48	0	25.22	34.52	4.41	0.48	22.93	493.8	0.000
12	25.12	34.53	3.89	0.44	10	25.12	34.53	3.89	0.44	22.97	490.5	0.049
25	25.05	34.47	4.06	0.45	20	25.08	34.51	4.05	0.44	22.97	491.2	0.098
48	23.15	34.42	3.97	0.38	30	25.04	34.45	4.03	0.44	22.94	494.8	0.148
70	19.03	34.29	4.27	0.43	50	22.90	34.42	3.96	0.38	23.54	437.3	0.241
89	15.47	34.00	2.70	1.39	75	18.00	34.22	4.25	0.68	24.69	328.2	0.337
134	12.12	34.18	1.86	2.00	100	14.80	34.01	2.27	1.59	25.27	273.6	0.412
174	12.09	34.74	0.41	2.76	150	12.10	34.40	1.58	2.32	26.12	193.6	0.528
255	11.03	34.76	0.25	2.83	200	11.84	34.77	0.32	2.81	26.46	162.9	0.617
354p	9.38	34.54	0.22	2.94	250	11.10	34.76	0.26	2.82	26.59	151.5	0.696
538p	7.35	34.52	0.17	3.25	300	10.33	34.69	0.24	2.88	26.67	144.4	0.770
727p	5.80	34.56	0.25	3.25	400	8.70	34.52	0.21	3.02	26.81	132.3	0.908
960p	4.55	34.43	0.39	3.28	500	7.64	34.52	0.19	3.21	26.97	117.9	1.033
					600	6.87	34.53	0.16	3.24	27.09	107.6	1.146
					700	6.03	34.55	0.22	3.24	27.21	95.9	1.248
					800	5.31	34.54	0.31	3.24	27.30	88.3	1.340
					1000	(4.39)	(34.41)	(0.36)	(3.30)	(27.30)	(88.3)	(1.517)

a) Alternate value, 2.84 μg at/L, not used in interpolation.
b) Alternate value, 2.88 μg at/L, not used in interpolation.

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

153.40 BLACK DOUGLAS; November 26, 1950; 0205 GCT; 22°07'N, 111°36.5'W; sounding, 1,680 fm; wind, 320°, force 3; weather, cloudy; sea, rough; wire angle, 3°.

0	25.33	34.54	3.97	0.47	0	25.33	34.54	3.97	0.47	22.91	495.5	0.000
10	25.36	(34.58)a)	3.58	0.07r	10	25.36	34.58	3.58	0.46	22.94	493.9	0.050
25	25.36	34.58	3.61	0.38	20	25.36	34.58	3.57	0.38	22.94	494.3	0.099
50	25.32	(34.60)	3.95	0.45	30	25.37	34.58	3.64	0.39	22.93	495.0	0.148
73	19.07	(34.02)	4.38	0.45	50	25.32	34.60	3.95	0.45	22.96	492.9	0.247
98	14.81	33.94	3.30	1.16	75	18.80	34.00	4.38	0.46	24.33	363.1	0.354
152	13.24	(34.69)	0.47	2.50	100	14.67	33.94	3.15	1.44	25.25	276.0	0.434
198	11.76	34.65	0.27	2.68	150	13.27	34.69	0.52	2.49	26.12	194.5	0.552
294	10.38	(34.65)	0.32	2.83	200	11.73	34.65	0.26	2.69	26.39	169.7	0.642
395	9.14	34.58	0.22	3.03	250	10.93	34.63	0.29	2.78	26.52	158.0	0.725
490	8.12	(34.56)	0.21	3.15	300	10.32	34.65	0.31	2.83	26.64	147.2	0.801
592	6.86	34.47	0.19	3.20	400	9.09	34.58	0.20	3.04	26.79	134.0	0.941
848	4.95	34.52	0.24	3.28	500	8.00	34.55	0.20	3.16	26.94	121.1	1.069
984	4.48	34.49	0.45	3.28	600	6.78	34.47	0.20	3.20	27.05	110.8	1.185
1185	3.81	(34.53)	0.59	3.25	700	5.88	34.49	0.20	3.26	27.19	98.3	1.288
					800	5.21	34.52	0.21	3.28	27.29	88.5	1.383
					1000	4.44	34.49	0.46	3.28	27.36	83.0	1.554

153.50 BLACK DOUGLAS; November 26, 1950; 0844 GCT; 21°47'N, 112°13.5'W; sounding, 1,840 fm; wind, 320°, force 2; weather, cloudy; sea, moderate; wire angle, 0°.

0	24.91	34.38	4.82	0.45	0	24.91	34.38	4.82	0.45	22.92	494.9	0.000
10	24.92	34.41	4.73	0.42	10	24.92	34.41	4.73	0.42	22.94	493.4	0.049
25	24.93	34.42	4.68	0.46	20	24.93	34.42	4.68	0.45	22.95	493.3	0.099
49	23.10	34.31	4.91	0.52	30	24.90	34.42	4.69	0.46	22.96	492.9	0.148
74	16.56	33.71	5.49	0.61	50	22.50	34.25	4.92	0.52	23.53	438.7	0.241
98	13.76	33.98	-	1.60	75	16.50	33.71	5.49	0.62	24.66	331.1	0.337
150	11.84	34.40	1.15	2.34	100	13.70	34.02	4.00	1.62	25.51	250.6	0.410
199	11.36	34.61	0.29	2.74	150	11.84	34.40	1.15	2.34	26.17	188.8	0.520
296	9.92	34.56	0.26	2.89	200	11.84	34.61	0.29	2.74	26.43	166.0	0.608
395	8.70	34.54	0.20	3.09	250	10.80	34.60	0.25	2.84	26.52	158.0	0.690
492	7.83	34.51	0.16	3.10	300	9.82	34.56	0.25	2.90	26.66	145.4	0.765
593	6.67	34.47	0.18	3.21	400	8.66	34.54	0.19	3.09	26.83	130.2	0.903
791	5.32	34.42	0.26	3.36	500	7.75	34.51	0.16	3.10	26.95	120.3	1.028
987	4.48	34.49	0.42	3.28	600	6.60	34.47	0.16	3.22	27.08	108.2	1.143
1189	3.76	34.61	0.68	3.34	700	5.87	34.44	0.20	3.31	27.15	101.9	1.248
					800	5.27	34.42	0.26	3.35	27.21	96.6	1.347
					1000	4.42	34.50	0.45	3.28	27.37	82.0	1.526

153.60 BLACK DOUGLAS; November 26, 1950; 1500 GCT; 21°29.1'N, 112°50'W; sounding, 2,020 fm; wind, 320°, force 3; weather, overcast; sea, rough; wire angle, 9°.

0	24.32	34.45	4.68	0.49	0	24.32	34.45	4.68	0.49	23.15	472.9	0.000
10	24.32	34.88	4.79	0.39	10	24.32	34.45	4.79	0.39	23.15	473.3	0.047
24	24.32	34.45	4.64	0.43	20	24.32	34.45	4.67	0.41	23.15	473.7	0.095
49	18.30	34.23	4.70	0.87	30	24.32	34.45	4.64	0.44	23.15	474.1	0.142
73	13.74	34.27	2.13	1.84b)	50	18.00	34.23	4.70	0.95	24.70	326.6	0.222
96	12.75	34.40	1.24	2.13c)	75	13.70	34.28	2.00	1.89	25.71	230.9	0.292
148	11.41	34.58	0.74	2.48	100	12.60	34.42	1.20	2.17	26.04	200.2	0.346
195	11.07	34.70	0.26	2.97r	150	11.40	34.58	0.72	(2.48)	26.39	167.7	0.438
291	9.83	34.63	0.17	2.76	200	11.04	34.70	0.24	(2.61)	26.55	153.7	0.518
389p	8.90	34.59	0.21	2.92	250	10.55	34.67	0.18	(2.70)	26.61	149.3	0.593
641p	6.22	34.54	0.24	3.12	300	9.75	34.62	0.17	2.78	26.70	141.3	0.666
827p	5.10	34.52	0.30	3.19	400	(8.80)	(34.58)	(0.21)	(2.92)	(26.84)	(129.4)	(0.802)
1051p	4.20	34.56	0.57	3.21	500	(7.65)	(34.57)	(0.26)	(2.98)	(27.01)	(114.4)	(0.924)
					600	(6.58)	(34.55)	(0.25)	(3.08)	(27.14)	(102.1)	(1.032)
					700	5.81	34.53	0.25	3.15	27.23	94.4	(1.130)
					800	5.24	34.52	0.29	3.18	27.29	88.9	(1.222)
					1000	4.37	34.55	0.50	3.21	27.41	77.7	(1.388)

a) Salinity values obtained from samples where bottle numbers had been washed off are indicated by parentheses because positive identification is impossible. Values are assumed to be listed in correct order.

b) Alternate value, 1.69 μg at/L, not used in interpolation.

c) Alternate value, 2.02 μg at/L, not used in interpolation.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

BLACK DOUGLAS; November 26, 1950; 2215 GCT; 21°06.5'N, 113°27.5'W; sounding, 2,120 fm; wind, 320°, force 2; weather, cloudy; sea, rough; wire angle, 25°. 153.70

0	23.70	34.40	4.85	0.49	0	23.70	34.40	4.85	0.49	23.30	459.0	0.000
9	23.44	34.36	4.76	0.51	10	23.43	34.36	4.76	0.51	23.35	454.8	0.046
22	23.31	34.34	4.80	0.52	20	23.31	34.34	4.77	0.52	23.37	453.3	0.091
45	18.10	33.73	5.52	0.41	30	23.29	34.29	4.95	0.50	23.33	456.7	0.137
67	15.24	33.57	5.53	0.46	50	17.00	33.61	5.53	0.41	24.47	348.8	0.217
89	13.43	33.69	4.39	1.07	75	14.20	33.58	5.46	0.59	25.07	292.1	0.297
135	12.48	34.25	1.92	2.15	100	13.10	33.98	3.20	1.38	25.60	241.9	0.364
177	11.04	34.42	1.28	2.34	150	12.10	34.31	1.66	2.22	26.05	200.2	0.474
261	10.27	34.61	0.30	2.81	200	10.71	34.51	0.96	2.46	26.47	161.9	0.565
348	9.18	34.61	0.18	2.94	250	10.35	34.61	0.34	2.77	26.61	149.5	0.643
432	8.07	34.61	0.17	2.99	300	9.85	34.61	0.20	2.88	26.69	142.2	0.716
520	7.16	34.54	0.18	3.14	400	8.48	34.61	0.17	2.90	26.91	122.2	0.847
694	5.82	34.56	0.21	3.22	500	7.35	34.55	0.17	3.10	27.04	111.5	0.964
870	4.82	34.52	0.27	3.27	600	6.51	34.54	0.19	3.17	27.14	101.8	1.071
1058	4.19	34.58	0.48	3.36	700	5.79	34.56	0.20	3.22	27.25	91.9	1.168
					800	5.20	34.54	0.21	3.25	27.31	86.9	1.257
					1000	4.36	34.56	0.41	3.31	27.42	76.9	1.422

BLACK DOUGLAS; November 28, 1950; 1942 GCT; 22°33'N, 109°23'W; sounding 1,600 fm; wind, calm; weather, cloudy; sea, moderate; wire angle, 0°. 157.10

0	27.25	34.70	3.79r	0.49	0	27.25	34.70	(4.38)	0.49	22.43	541.6	0.000
10	-	34.76	4.38	0.52	10	27.22	34.76	4.38	0.52	22.49	536.7	0.054
25	26.99	34.78	4.36	0.55	20	27.10	34.78	4.36	0.54	22.54	532.0	0.107
50	24.01	34.52	4.76	0.70	30	26.90	34.78	4.34	0.57	22.61	526.3	0.160
75	17.45	34.18	3.59	1.20	50	24.01	34.52	4.76	0.70	23.30	461.0	0.259
99	14.79	34.51	1.52	2.33a)	75	17.45	34.18	3.59	1.20	24.80	318.3	0.356
152	12.74	34.70	0.64	2.82	100	14.72	34.53	1.50	2.33	25.69	234.0	0.425
201	11.84	34.72	0.24	2.95	150	12.78	34.70	0.68	2.82	26.22	184.3	0.530
297	10.51	34.67	0.16	2.90	200	11.85	34.72	0.24	2.91	26.42	166.7	0.617
397	9.11	34.65	0.19	3.21	250	11.10	34.70	0.16	2.95	26.54	155.9	0.698
493	7.92	34.63	0.18	3.30	300	10.48	34.67	0.16	2.90	26.63	148.4	0.774
592	6.78	34.58	0.16	3.37	400	9.07	34.65	0.20	3.22	26.85	128.6	0.913
788	5.15	34.58	0.25	3.39	500	7.85	34.63	0.16	3.30	27.03	112.9	1.034
983	4.48	34.60	0.42	-	600	6.71	34.58	0.16	3.37	27.15	101.7	1.141
1186	3.75	34.63	0.64	3.40	700	5.76	34.58	0.19	3.39	27.27	90.0	1.237
					800	5.10	34.58	0.25	3.39	27.35	82.6	1.323
					1000	4.43	34.60	0.44	3.40	27.44	74.8	1.480

BLACK DOUGLAS; November 28, 1950; 1323 GCT; 22°13'N, 110°00'W; sounding, 1,700 fm; wind, calm; weather, partly cloudy; sea, moderate; wire angle, 3°. 157.20

0	26.49	34.72	4.56	0.44	0	26.49	34.72	4.56	0.50	22.69	517.0	0.000
10	-	34.72	4.54	0.45	10	26.40	34.72	4.54	0.45	22.72	514.7	0.052
25	26.28	34.72	4.63	0.46	20	26.30	34.72	4.59	0.45	22.75	512.1	0.103
50	24.04	34.56	4.56	0.52b)	30	26.20	34.72	4.63	0.47	22.78	509.5	0.154
75	17.33	34.22	3.28	1.33	50	24.04	34.56	4.56	0.52	23.32	459.0	0.251
99	14.62	34.43	1.92	2.21	75	17.33	34.22	3.28	1.33	24.86	312.4	0.347
152	12.48	34.74	0.58	2.78	100	14.60	34.44	1.91	2.25	25.65	238.1	0.416
199	11.85	34.70	0.37	2.88	150	12.55	34.74	0.59	2.77	26.30	177.0	0.520
295	10.49	34.69	0.26	2.86	200	11.84	34.70	0.36	2.88	26.41	168.0	0.606
394	9.11	34.62	0.19	2.95	250	11.23	34.69	0.28	2.87	26.51	158.9	0.688
489	7.80	34.62	0.14	3.11	300	10.41	34.69	0.25	2.86	26.65	145.8	0.764
592	6.70	34.58	0.21	3.14	400	9.04	34.62	0.18	2.96	26.83	130.3	0.902
790	5.25	34.58	0.29	3.15	500	7.66	34.62	0.15	3.11	27.05	110.8	1.022
984	4.46	34.56	0.42	3.28	600	6.65	34.58	0.21	3.14	27.16	100.8	1.128
1185	3.80	34.60	0.67	3.13	700	5.85	34.57	0.26	3.14	27.25	92.0	1.224
					800	5.18	34.58	0.30	3.15	27.34	83.7	1.312
					1000	4.40	34.56	0.42	3.28	27.42	77.3	1.473

a) Alternate value, 2.17 μg at/L, not used in interpolation.
b) Alternate value, 0.66 μg at/L, not used in interpolation.

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

157.30 BLACK DOUGLAS; November 27, 1950; 2327 GCT; 21°52.5'N, 110°37.5'W; sounding, 1,710 fm; wind, 320°, force 2; weather, cloudy; sea, moderate; wire angle, 10°.

0	26.99	34.88	3.40	0.38	0	26.99	34.88	3.40	0.38	22.65	520.7	0.000
10	-	34.88	3.19	0.43	10	26.80	34.88	3.19	0.43	22.71	515.3	0.052
25	26.38	34.78	3.46	0.43	20	26.52	34.85	3.31	0.44	22.78	509.4	0.103
48	20.72	34.00	4.38	0.40	30	24.70	34.57	3.68	0.42	23.13	476.3	0.152
73	15.16	33.64	4.11	0.45	50	20.20	33.90	4.37	0.40	23.89	404.0	0.240
96	13.24	33.87	2.55	1.42	75	14.90	33.64	4.00	0.45	24.97	302.0	0.329
148	12.27	34.52	0.85	2.50	100	13.10	33.98	2.34	1.68	25.60	241.9	0.397
195	11.65	34.78	0.30	2.79	150	12.25	34.55	0.80	2.54	26.21	185.3	0.503
290	10.49	34.70	0.21	2.80	200	11.59	34.78	0.27	2.80	26.51	157.6	0.589
389	9.15	34.63	0.18	2.99	250	10.95	34.75	0.24	2.80	26.61	149.6	0.666
483	7.98	34.52	0.21	3.11	300	10.35	34.69	0.20	2.81	26.67	144.7	0.739
578	6.81	34.51	0.19	3.30	400	9.00	34.62	0.18	3.00	26.84	129.6	0.876
776	5.47	34.52	0.28	3.23u	500	7.76	34.52	0.20	3.14	26.95	119.7	1.001
965	4.48	34.56	0.36	3.42	600	6.60	34.51	0.20	(3.32)	27.11	105.3	1.113
1165	3.82	34.61	0.64	3.43	700	5.92	34.52	0.24	(3.40)	27.21	96.6	1.214
					800	5.34	34.52	0.31	(3.42)	27.28	90.2	1.308
					1000	4.33	34.57	0.37	3.42	27.43	75.7	1.473

157.40 BLACK DOUGLAS; November 27, 1950; 0032 GCT; 21°32.5'N, 111°14.5'W; sounding, 1,780 fm; wind 340°, force 2; weather, partly cloudy; sea, rough; wire angle, 4°.

0	25.32	34.49	3.95	0.44	0	25.32	34.49	3.95	0.44	22.88	498.9	0.000
10	25.04	34.47	4.19	0.32	10	25.04	34.47	4.19	0.32	22.95	492.5	0.050
25	25.02	34.45	4.12	0.42	20	25.02	34.45	4.14	0.39	22.94	493.8	0.099
49	20.35	34.14	4.72	0.31	30	25.00	34.44	4.15	0.41	22.94	494.3	0.148
73	14.85	33.99	3.52	1.23	50	20.30	34.13	4.72	0.31	24.04	389.9	0.237
97	14.84	34.84	0.91	2.56	75	14.85	33.99	3.00	1.40	25.25	275.4	0.320
151	13.41	34.88	0.56	2.71	100	14.84	34.85	0.83	2.58	25.91	213.1	0.381
197	12.65	34.87	0.51	2.70	150	13.43	34.88	0.56	2.70	26.23	183.7	0.480
293	11.10	34.74	0.16	2.89	200	12.60	34.87	0.50	2.70	26.39	169.7	0.569
393	9.81	34.67	0.22	2.96	250	11.83	34.80	0.33	2.79	26.48	161.7	0.651
489	8.32	34.58	0.24	3.07	300	11.00	34.73	0.16	2.90	26.58	153.1	0.729
590	6.94	34.52	0.21	3.15	400	9.71	34.66	0.21	2.96	26.76	138.3	0.875
786	5.56	34.54	0.23	3.31	500	8.15	34.57	0.24	3.08	26.93	121.9	1.006
981	4.63	34.58	0.31	3.38	600	6.84	34.52	0.21	3.16	27.08	107.9	1.120
1188	3.83	34.58	0.58	3.33	700	6.10	34.52	0.21	3.25	27.18	99.1	1.224
					800	5.48	34.54	0.23	3.32	27.28	90.5	1.319
					1000	4.57	34.58	0.31	3.38	27.41	78.0	1.487

157.50 BLACK DOUGLAS; November 27, 1950; 1645 GCT; 21°11'N, 111°53'W; sounding, 1,980 fm; wind, 340°, force 3; weather, partly cloudy; sea, rough; wire angle, 5°.

0	24.48	34.33	4.62	0.48	0	24.48	34.33	4.62	0.48	23.01	486.1	0.000
10	24.48	34.29	4.69	0.44	10	24.48	34.29	4.69	0.44	22.98	489.4	0.049
25	24.44	34.34	4.68	0.46	20	24.43	34.33	4.68	0.44	23.02	485.5	0.098
50	19.52	(34.07)a)	4.90	0.65	30	24.35	34.34	4.70	0.47	23.06	482.9	0.146
74	16.16	33.91	4.21	0.97	50	19.52	34.07	4.90	0.65	24.20	374.8	0.232
98	14.31	33.89	2.44	1.65	75	16.20	33.91	4.20	1.00	24.88	310.0	0.317
150	12.83	34.61	0.89	2.58	100	14.22	33.89	2.37	1.75	25.30	270.5	0.390
198	11.26	(34.69)	0.57	2.60	150	12.83	34.61	0.89	2.58	26.14	191.9	0.505
294	10.28	(34.58)	0.19	2.78	200	11.23	34.69	0.54	2.60	26.51	157.8	0.593
395	8.67	(34.54)	0.26	3.08	250	10.70	34.64	0.31	2.68	26.57	153.3	0.671
491	7.62	(34.51)	0.17	3.21	300	10.24	34.58	0.19	2.80	26.60	150.9	0.746
591	6.80	(34.49)	0.22	3.27	400	8.61	34.54	0.26	3.10	26.84	129.4	0.886
789	5.40	(34.52)	0.18u	3.38	500	7.55	34.51	0.18	3.22	26.98	117.3	1.010
983	4.56	-	0.35	3.45	600	6.72	34.49	(0.24)	3.28	27.08	108.4	1.123
1186	3.82	34.54	0.62	3.33	700	6.00	34.50	(0.29)	3.35	27.18	99.2	1.227
					800	5.35	34.52	(0.31)	3.38	27.28	90.3	1.321
					1000	4.48	34.57	0.36	3.44	27.41	77.6	1.489

a) Salinity values obtained from samples where bottle numbers had been washed off are indicated by parentheses because positive identification is impossible. Values are assumed to be listed in correct order.

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OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
BLACK DOUGLAS; November 27, 1950; 1009 GCT; 20°51'N, 112°30'W; sounding, 2,040 fm; wind, 340°, force 3; weather, partly cloudy; sea, rough; wire angle, 14°.													157.60
0	23.70	34.37	4.89	0.42	0	23.70	34.37	4.89	0.42	23.27	461.2	0.000	
10	23.71	34.36	5.04	0.50	10	23.71	34.36	5.04	0.50	23.26	462.6	0.046	
24	23.69	34.36	4.59	0.50	20	23.70	34.36	4.65	0.50	23.27	462.9	0.092	
49	17.30	33.59	5.69	0.42	30	23.68	34.36	4.66	0.48	23.27	462.5	0.139	
73	14.73	33.53	5.46	0.46	50	17.28	33.59	5.69	0.42	24.38	357.0	0.221	
97	13.23	33.77	3.93	1.14	75	14.52	33.53	5.41	0.48	24.96	302.3	0.303	
147	12.40	34.51	0.85	2.65	100	13.15	34.03	3.50	1.24	25.63	239.2	0.371	
194	11.36	34.61	0.35	2.67	150	12.12	34.52	0.80	2.65	26.21	185.1	0.476	
287	10.07	34.66	0.32	2.77	200	11.27	34.62	0.33	2.67	26.45	163.6	0.564	
384	8.91	34.54	0.19	2.90	250	10.55	34.65	0.31	2.73	26.60	150.0	0.642	
477	7.56	34.49	0.16	3.11	300	9.90	34.66	0.32	2.78	26.72	139.3	0.715	
575	6.61	34.48	0.16	3.20	400	8.70	34.53	0.17	2.94	26.82	131.5	0.850	
768	5.41	34.51	0.18	3.32	500	7.30	34.49	0.16	3.15	27.00	115.2	0.973	
960	4.66	34.58	0.29	3.37	600	6.40	34.48	0.16	3.21	27.11	104.7	1.083	
1161	3.90	34.55	0.53	3.36	700	5.77	34.49	0.16	3.28	27.20	96.8	1.184	
					800	5.25	34.52	0.19	3.33	27.29	89.0	1.277	
					1000	4.52	34.58	0.35	3.36	27.42	77.4	1.444	
BLACK DOUGLAS; November 27, 1950; 0403 GCT; 20°32'N, 113°06'W; sounding, 1,900 fm; wind, 320°, force 2; weather, partly cloudy; sea, moderate; wire angle, 15°.													157.70
0	23.53	34.45	4.81	0.30	0	23.53	34.45	4.81	0.30	23.38	450.7	0.000	
10	23.52	34.43	4.89	0.30	10	23.52	34.43	4.89	0.30	23.37	452.2	0.045	
24	23.53	34.45	5.00	0.32	20	23.52	34.44	4.97	0.32	23.38	451.9	0.090	
48	22.61	34.58	5.20	0.29	30	23.55	34.49	5.05	0.31	23.41	449.5	0.135	
71	18.03	34.27	5.42	0.35	50	22.30	34.58	5.23	0.30	23.84	409.5	0.221	
94	14.76	33.71	5.39	0.48	75	17.10	34.10	5.42	0.37	24.82	316.2	0.312	
144	12.56	34.52	1.24	2.40	100	14.40	33.71	5.30	0.63	25.13	287.3	0.388	
189	12.02	35.11r	0.42	2.56	150	12.45	(34.65)	1.06	2.43	(26.25)	(181.7)	(0.505)	
279	10.28	34.61	0.38	2.67	200	11.86	(34.77)	0.37	2.58	(26.45)	(163.1)	(0.591)	
373	9.02	34.49	0.34	2.90	250	10.93	(34.72)	0.36	2.64	(26.60)	(150.7)	(0.670)	
463	8.04	34.49	0.18	3.02	300	9.95	34.57	0.38	2.70	26.64	146.8	(0.744)	
559	6.98	34.67r	0.26u	3.24	400	8.70	34.49	0.29	2.94	26.77	136.0	(0.885)	
749	5.52	34.79r	0.19	3.29	500	7.62	(34.49)	(0.20)	3.12	(26.95)	(119.9)	(1.013)	
939	4.73	34.63r	0.34	3.28	600	6.62		(0.20)	3.26				
1141	4.04	34.52	0.75	3.32	700	5.86		(0.20)	3.28				
					800	5.25		0.20	3.28				
					1000	4.53		0.48	3.29				
E. W. SCRIPPS; November 11, 1950; 2110 GCT; 26°49'N, 114°58'W; sounding, 1,850 fm; wind, 340°, force 2; weather, clear; sea, rough; wire angle, 4°.													D-1 (125.45)
0	19.99	33.57			0	19.99	33.57			23.70	421.0	0.000	
10	19.70	33.54			10	19.70	33.54			23.75	416.3	0.042	
25	19.68	33.57			20	19.69	33.56			23.77	414.9	0.083	
49	15.46	33.27			30	19.61	33.57			23.79	412.6	0.125	
74	13.77	33.35			50	15.40	33.27			24.57	338.8	0.200	
98	12.33	33.51			75	13.63	33.35			25.01	297.7	0.279	
152	9.68	33.89			100	12.17	33.51			25.42	259.0	0.349	
202	8.76	34.13			150	9.72	33.89			26.15	190.1	0.461	
299	8.66	34.34			200	8.76	34.12			26.49	159.0	0.549	
402	7.68	34.39			250	8.70	34.26			26.61	148.7	0.625	
500	6.60	34.38			300	8.65	34.34			26.68	142.9	0.699	
604	5.88	34.40			400	7.71	34.39			26.86	126.9	0.833	
804	4.67	34.45			500	6.59	34.38			27.01	113.3	0.953	
1000	4.10	34.49			600	5.90	34.40			27.11	103.9	1.062	
1205	3.56	34.55			700	5.30	34.43			27.21	95.1	1.161	
					800	4.70	34.45			27.30	87.2	1.253	
					1000	4.10	34.49			27.39	78.8	1.419	

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

D-2 (125.45) E. W. SCRIPPS; November 12, 1950; 0655 GCT; 26°47.5'N, 114°55.5'W; sounding, 2,080 fm; wind, 330°, force 2; weather, clear; sea, rough; wire angle 1°.

0	19.77	33.56	0	19.77	33.56	23.75	416.2	0.000
10	19.75	33.56	10	19.75	33.56	23.75	416.1	0.042
25	19.70	33.57	20	19.73	33.57	23.76	415.2	0.083
50	15.88	33.22	30	19.60	33.57	23.80	412.3	0.125
75	13.90	33.42	50	15.88	33.22	24.43	352.6	0.201
100	12.24	33.53	75	13.90	33.42	25.01	297.9	0.282
153	9.68	33.75	100	12.24	33.53	25.42	258.8	0.352
202	9.48	34.14	150	9.71	33.73	26.03	201.7	0.467
299	8.44	34.32	200	9.48	34.12	26.37	170.2	0.560
404	7.65	34.38	250	9.09	34.25	26.54	155.4	0.641
502	6.84	34.40	300	8.41	34.32	26.70	140.7	0.716
604	5.85	34.42	400	7.66	34.38	26.86	126.9	0.849
806	4.77	34.44	500	6.86	34.40	26.99	115.6	0.970
1002	4.05	34.52	600	5.88	34.42	27.13	102.2	1.079
1206	3.54	34.54	700	5.28	34.43	27.21	94.9	1.177
			800	4.80	34.44	27.28	89.2	1.269
			1000	4.05	34.52	27.42	76.0	1.435

D-3 (125.45) E. W. SCRIPPS; November 12, 1950; 1234 GCT; 26°46.5'N, 114°54'W; sounding, missing; wind, 340°, force 4; weather, clear; sea, rough; wire angle, 15°.

0	19.69	33.56	0	19.69	33.56	23.77	414.3	0.000
9	19.68	33.56	10	19.68	33.56	23.77	414.3	0.041
24	19.71	33.55	20	19.71	33.55	23.75	416.1	0.083
48	15.65	33.23	30	19.70	33.54	23.75	417.0	0.125
71	13.84	33.37	50	15.35	33.23	24.55	340.7	0.200
95	12.25	33.51	75	13.61	33.40	25.05	293.6	0.280
146	9.97	33.80	100	11.95	33.53	25.48	253.5	0.348
193	9.44	34.18	150	9.90	33.84	26.08	196.7	0.460
286	8.60	34.28	200	9.39	34.19	26.44	163.6	0.551
385	8.11	34.42	250	8.92	34.25	26.56	152.8	0.630
480	7.06	34.42	300	8.50	34.30	26.67	143.6	0.704
580	6.08	34.42	400	8.03	34.42	26.83	129.4	0.840
775	4.91	34.45	500	6.80	34.42	27.01	113.2	0.961
971	4.27	34.51	600	5.91	34.42	27.13	102.6	1.069
1175	3.64	34.52	700	5.30	34.43	27.21	95.1	1.168
			800	4.80	34.46	27.29	87.7	1.259
			1000	4.19	34.52	27.41	77.7	1.425

D-4 (125.45) E. W. SCRIPPS; November 12, 1950; 1834 GCT; 26°43.5'N, 114°51.5'W; sounding, 2,000 fm; wind, 340°, force 2; weather, clear; sea, rough; wire angle, 1°.

0	19.74	33.55	0	19.74	33.55	23.75	416.2	0.000
10	19.68	33.58	10	19.68	33.58	23.78	412.9	0.041
25	19.68	-	20	19.68	33.44	23.68	423.4	0.083
49	15.37	33.26	30	19.67	33.32	23.59	432.2	0.126
74	13.58	33.28	50	15.33	33.26	24.58	338.0	0.203
99	12.55	33.54	75	13.55	33.28	24.97	301.3	0.283
153	9.70	33.87	100	12.45	33.55	25.40	261.2	0.353
202	8.94	34.07	150	9.76	33.86	26.12	192.9	0.466
301	8.58	34.33	200	8.96	34.06	26.41	166.5	0.557
403	7.72	34.40	250	8.69	34.21	26.57	152.2	0.636
500	6.84	34.43	300	8.59	34.33	26.68	142.7	0.710
604	5.98	34.42	400	7.74	34.40	26.86	126.6	0.844
804	4.81	34.47	500	6.84	34.43	27.01	113.1	0.964
1002	4.10	34.49	600	6.01	34.42	27.11	103.9	1.072
1206	3.57	34.51	700	5.37	34.44	27.21	95.3	1.172
			800	4.82	34.47	27.30	87.2	1.263
			1000	4.11	34.49	27.39	78.9	1.430

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OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

E. W. SCRIPPS; November 13, 1950; 0025 GCT; 26°41.5'N, 114°49.5'W; sounding, 2,050 fm; wind, 150°, force 3; weather, clear; sea, moderate; wire angle, 14°. D-5 (125.45)

0	19.94	33.55	0	19.94	33.55	23.69	421.2	0.000	
10	19.69	33.55	10	19.69	33.55	23.76	415.3	0.042	
25	19.59	33.53	20	19.61	33.54	23.77	414.4	0.082	
48	15.30	33.26	30	19.53	33.52	23.78	414.2	0.125	
72	13.48	33.44	50	15.01	33.26	24.65	331.4	0.199	
95	12.24	33.62	75	13.26	33.47	25.18	281.7	0.276	
145	9.95	33.80	100	11.92	33.64	25.57	244.9	0.342	
193	9.15	34.04	150	9.84	33.82	26.08	197.2	0.452	
287	8.54	34.42	200	9.07	34.08	26.41	166.7	0.543	
385	7.69	34.40	250	8.71	34.35	26.68	142.1	0.620	
481	7.00	34.52	300	8.46	34.42	26.77	134.1	0.690	
580	6.03	34.43	400	7.56	34.41	26.90	132.2	0.817	
777	4.86	34.47	500	6.84	34.52	27.08	106.4	0.933	
971	4.24	34.58	600	5.89	34.43	27.14	101.6	1.037	
1173	3.65	34.53	700	5.29	34.45	27.23	93.5	1.135	
			800	4.76	34.48	27.31	85.7	1.224	
			1000	4.16	34.58	27.46	72.9	1.383	

E. W. SCRIPPS; November 13, 1950; 1727, 1754 GCT; 27°45'N, 115°34'W; sounding, 1,100 fm; wind, 240°, force 1; weather, cloudy; sea, moderate; wire angle, 0°, 0°. 120.45K-1

0	19.58	33.78	0	19.58	33.78	23.96	396.2	0.000	
10	19.55	33.76	10	19.55	33.76	23.95	396.9	0.040	
25	19.56	33.78	20	19.55	33.78	23.97	395.8	0.079	
50	14.39	33.37	30	18.30	33.58	24.13	380.5	0.118	
74	11.94	33.62	50	14.39	33.37	24.87	310.9	0.187	
99	11.00	33.85	75	11.90	33.62	25.56	245.5	0.257	
152	9.56	34.02	100	10.94	33.86	25.92	211.6	0.314	
202	9.26	34.21	150	9.55	34.02	26.28	177.9	0.412	
299	8.56	34.40u	200	9.28	34.22	26.48	159.9	0.496	
400	7.69	34.36	250	9.40	34.46	26.65	145.0	0.571	
499	6.86	34.41	300	8.51	34.32	26.68	142.4	0.644	
603	5.98	34.45u	400	7.69	34.36	26.84	128.7	0.779	
805	4.70	34.45	500	6.90	34.42	27.00	114.7	0.901	
			600	6.00	(34.42)	(27.12)	(103.9)	(1.010)	
1001	3.96	34.50	700	5.32	(34.44)	(27.22)	(94.8)	(1.110)	
			800	4.75	(34.46)	(27.30)	(87.2)	(1.201)	
			1000	3.96	34.50	27.42	76.6	(1.364)	

E. W. SCRIPPS; November 13, 1950; 2007 GCT; 27°45'N, 115°34'W; sounding, 1,040 fm; wind, 240°, force 1; weather, cloudy; sea, moderate; wire angle, 1°. 120.45K-2

0	19.70	33.70	0	19.70	33.70	23.87	404.6	0.000	
10	19.57	33.69	10	19.57	33.69	23.89	403.4	0.040	
25	19.56	33.69	20	19.51	33.69	23.91	401.2	0.081	
50	14.66	33.45	30	19.51	33.69	23.91	401.6	0.121	
74	11.97	33.51	50	14.66	33.45	24.87	310.5	0.192	
99	11.03	33.69	75	11.89	33.51	25.48	253.4	0.262	
153	9.55	33.95	100	10.99	33.70	25.79	224.2	0.322	
204	9.29	34.18	150	9.60	33.94	26.21	184.6	0.425	
302	8.23	34.29	200	9.30	34.18	26.45	163.1	0.511	
403	7.63	34.40	250	9.65	34.47	26.62	148.4	0.589	
502	6.69	34.43	300	8.29	34.29	26.69	141.4	0.662	
604	5.86	34.42	400	7.65	34.40	26.88	125.4	0.795	
804	4.70	34.40u	500	6.75	34.43	27.02	112.0	0.914	
1000	3.96	34.52	600	5.90	34.42	27.13	102.6	1.021	
1206	3.42	34.56	700	5.21	34.43	27.22	94.2	1.119	
			800	4.71	34.45	27.30	87.4	1.210	
			1000	3.96	34.52	27.43	75.1	1.372	

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

120.45K-3 E. W. SCRIPPS; November 13, 1950; 2244 GCT; 27°45'N, 115°34'W; sounding, 990 fm; wind, 220°, force 2; weather, cloudy; sea, moderate; wire angle, 3°.

0	19.76	33.71	0	19.76	33.71	23.86	405.3	0.000
10	19.56	33.73	10	19.56	33.73	23.93	399.3	0.040
26	17.25	33.40	20	19.50	33.73	23.95	398.0	0.080
51	14.35	33.62	30	15.70	33.31	24.54	341.7	0.117
75	11.78	33.56	50	14.34	33.62	25.07	291.7	0.180
100	11.05	33.66	75	11.76	33.56	25.54	247.5	0.248
125	11.07	34.02	100	11.05	33.66	25.74	228.3	0.307
154	9.56	34.00	150	9.61	34.00	26.26	180.3	0.410
203	9.64	34.27	200	9.63	34.26	26.46	162.3	0.495
251	9.77	34.49	250	9.78	34.49	26.61	149.1	0.572
300	8.25	34.29	300	8.25	34.29	26.70	140.7	0.645

120.45K-4 E. W. SCRIPPS; November 14, 1950; 0208 GCT; 27°45'N, 115°34'W; sounding, 1,020 fm; wind, 260°, force 2; weather, overcast; sea, moderate; wire angle, 0°.

0	19.64	33.71	0	19.64	33.71	23.89	402.5	0.000
10	19.54	33.67	10	19.54	33.67	23.89	403.1	0.040
25	19.51	33.62u	20	19.50	33.68	23.91	401.7	0.080
50	15.62	33.57u	30	19.50	33.68	23.91	402.1	0.121
74	12.17	33.53	50	15.62	33.34	24.58	338.5	0.195
99	11.08	33.66	75	12.08	33.52	25.44	256.4	0.269
153	9.54	33.96	100	11.09	33.66	25.74	229.1	0.330
202	9.70	34.29	150	9.60	33.96	26.23	183.1	0.433
300	8.26	34.27	200	9.70	34.28	26.46	162.1	0.519
403	7.73	34.34	250	9.26	34.47	26.62	147.7	0.596
500	6.75	34.43	300	8.26	34.27	26.68	142.3	0.669
603	5.98	34.41	400	7.73	34.34	26.82	130.9	0.806
804	4.70	34.43	500	6.75	34.43	27.03	112.0	0.928
1001	4.03	34.49	600	6.00	34.41	27.11	104.7	1.036
1204	3.47	34.51	700	5.38	34.41	27.18	97.9	1.137
			800	4.70	34.43	27.28	88.8	1.231
			1000	4.05	34.49	27.40	78.5	1.398

120.45K-5 E. W. SCRIPPS; November 14, 1950; 0500 GCT; 27°45'N, 115°34'W; sounding, 1,030 fm; wind, 255°, force 2; weather, cloudy; sea, moderate; wire angle, 0°.

0	19.59	33.70	0	19.59	33.70	23.90	402.0	0.000
10	19.58	33.69	10	19.58	33.69	23.89	402.9	0.040
25	19.51	33.68	20	19.54	33.68	23.90	402.7	0.080
50	15.41	33.30	30	19.50	33.68	23.91	402.1	0.121
74	12.80	33.61	50	15.41	33.30	24.59	337.1	0.195
98	11.23	33.63	75	12.59	33.59	25.40	260.7	0.269
123	11.48	34.05	100	11.23	33.64	25.69	233.0	0.331
152	9.54	33.96	150	9.57	33.96	26.23	182.6	0.435
200	9.74	34.32	200	9.74	34.32	26.48	160.0	0.521
249	9.56	34.42	250	9.72	34.42	26.57	153.1	0.598
299	8.25	34.27	300	(8.22)	(34.27)	(26.69)	(141.7)	(0.673)

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

E. W. SCRIPPS; November 14, 1950; 0800 GCT; 27°45'N, 115°34'W; sounding, 1,080 fm; wind, 250°, force 2; weather, clear; sea, moderate; wire angle, 0°. 120.45K-6

0	19.54	33.70	0	19.54	33.70	23.91	400.7	0.000	
10	19.53	33.71	10	19.53	33.71	23.92	399.9	0.040	
25	19.52	33.68	20	19.51	33.69	23.91	401.2	0.080	
50	14.34	33.48	30	19.50	33.68	23.91	402.1	0.120	
75	12.15	33.51	50	14.34	33.48	24.96	302.0	0.191	
99	11.13	33.65	75	12.15	33.51	25.42	258.3	0.261	
155	9.56	34.04	100	11.13	33.65	25.72	230.6	0.322	
204	9.28	34.22	150	9.62	34.02	26.27	178.9	0.425	
303	8.20	34.27	200	9.31	34.22	26.48	160.3	0.509	
404	7.74	34.42	250	9.50	34.46	26.64	146.6	0.585	
502	6.69	34.41	300	8.23	34.28	26.70	141.1	0.658	
604	5.88	34.43	400	7.75	34.42	26.88	125.3	0.791	
805	4.78	34.44	500	6.68	34.41	27.02	112.4	0.910	
1002	4.00	34.49	600	5.91	34.43	27.14	102.0	1.017	
1205	3.49	34.54	700	5.35	34.44	27.21	95.3	1.116	
			800	4.74	34.44	27.28	88.6	1.208	
			1000	4.00	34.49	27.40	77.9	1.374	

E. W. SCRIPPS; November 14, 1950; 1103 GCT; 27°45'N, 115°34'W; sounding, 1,030 fm; wind, 270°, force 3; weather, clear; sea, moderate; wire angle, 4°. 120.45K-7

0	19.52	33.69	0	19.52	33.69	23.91	400.8	0.000	
10	19.53	33.69	10	19.53	33.69	23.91	401.2	0.040	
25	19.47	33.70	20	19.49	33.70	23.92	400.0	0.080	
47p	15.21	33.37	30	19.08	33.66	24.00	393.6	0.120	
50	13.93	33.44	50	13.93	33.44	25.02	296.5	0.189	
74	11.78	33.50	75	11.71	33.51	25.51	250.5	0.257	
100	11.26	33.73	100	11.26	33.73	25.76	226.9	0.317	
124	9.55	33.96							

E. W. SCRIPPS; November 14, 1950; 1408 GCT; 27°45'N, 115°34'W; sounding, 1,060 fm; wind, 250°, force 3; weather, cloudy; sea, moderate; wire angle, 0°. 120.45K-8

0	19.50	33.71	0	19.50	33.71	23.93	398.8	0.000	
10	19.49	33.71	10	19.49	33.71	23.93	399.0	0.040	
25	19.50	33.69	20	19.50	33.70	23.92	400.2	0.080	
49	14.21	33.40	30	19.18	33.66	23.97	396.0	0.120	
75	12.28	33.51	50	14.05	33.40	24.96	302.0	0.189	
100	11.28	33.78	75	12.28	33.51	25.40	260.7	0.260	
124	10.32	33.95	100	11.28	33.78	25.79	223.6	0.320	
154	9.52	33.98	150	9.55	33.98	26.25	180.9	0.422	
202	9.85	34.34	200	9.85	34.32	26.47	161.6	0.507	
249	9.63	34.47	250	9.64	34.47	26.62	148.2	0.584	
298	8.54	34.34	300	(8.71)	(34.33)	(26.66)	(144.7)	(0.658)	

E. W. SCRIPPS; November 14, 1950; 1700 GCT; 27°45'N, 115°34'W; sounding, 1,060 fm; wind, 220°, force 2; weather, partly cloudy; sea, moderate; wire angle, 0°. 120.45K-9

0	19.52	33.68	0	19.52	33.68	23.90	401.5	0.000	
10	19.49	33.68	10	19.49	33.68	23.91	401.2	0.040	
25	19.49	33.69	20	19.49	33.69	23.92	400.7	0.080	
50	14.04	33.33	30	19.48	33.69	23.92	401.0	0.120	
74	12.10	33.53	50	14.04	33.33	24.91	306.9	0.191	
98	11.14	33.71	75	12.00	33.54	25.48	253.3	0.261	
123	10.96	34.00	100	11.11	33.72	25.78	225.1	0.321	
153	9.76	33.92	150.	9.80	33.92	26.16	189.4	0.425	
202	9.35	34.16	200	9.34	34.15	26.42	166.0	0.513	
250	9.75	34.52u	250	9.75	34.49	26.62	148.6	0.591	
300	8.42	34.33	300	8.42	34.33	26.71	140.2	0.664	

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

120.45K-10 E. W. SCRIPPS; November 14, 1950; 2000 GCT; 27°45'N, 115°34'W; sounding, 1,020 fm; wind, 210°, force 2; weather, cloudy; sea, moderate; wire angle, 0°.

0	19.75	33.68	0	19.75	33.68	23.84	407.3	0.000
10	19.51	33.77	10	19.51	33.77	23.97	395.1	0.040
25	19.49	33.75	20	19.50	33.76	23.97	395.8	0.080
50	13.74	33.35	30	19.49	33.75	23.96	396.8	0.119
75p	14.92	33.75	50	13.74	33.35	24.99	299.4	0.189
99p	13.01	33.39						
225p	9.94	33.40						
311p	8.20	34.45						
384p	7.57	34.38						
446p	7.05	34.42						
611p	5.58	34.52						
779p	4.76	34.56						

120.45K-11 E. W. SCRIPPS; November 14, 1950; 2300 GCT; 27°45'N, 115°34'W; sounding, 1,020 fm; wind, 200°, force 3; weather, cloudy; sea, moderate; wire angle, 0°.

0	19.70	33.78	0	19.70	33.78	23.93	398.9	0.000
10	19.51	33.75	10	19.51	33.75	23.96	396.5	0.040
25	19.50	33.78	20	19.49	33.76	23.97	395.7	0.079
50	14.08	33.28	30	19.30	33.76	24.02	391.5	0.119
74	12.36	33.60	50	14.08	33.28	24.86	311.4	0.189
98	11.16	33.73	75	12.28	33.60	25.47	254.1	0.260
152	9.70	34.07	100	11.17	33.75	25.79	223.9	0.319
201	9.72	34.38	150	9.74	34.06	26.28	178.1	0.420
298	8.58	34.43u	200	9.73	34.38	26.53	155.2	0.503
401	7.72	34.49u	250	9.45	(34.45)	(26.64)	(146.6)	(0.578)
498	6.74	34.51u	300	8.55	(34.32)	(26.68)	(143.0)	(0.651)
602	5.92	34.43	400	7.71	(34.36)	(26.84)	(129.2)	(0.787)
804	4.77	34.52u	500	6.73	(34.41)	(27.01)	(113.0)	(0.908)
1003	4.08	34.55	600	5.92	34.43	(27.13)	(102.1)	(1.016)
1207	3.48	34.64	700	5.26	(34.45)	(27.23)	(93.4)	(1.114)
			800	4.75	(34.49)	(27.32)	(85.1)	(1.203)
			1000	4.08	34.55	(27.44)	(74.4)	(1.362)

120.45K-12 E. W. SCRIPPS; November 15, 1950; 0200 GCT; 27°45'N, 115°34'W; sounding, 1,020 fm; wind, 330°, force 2; weather, partly cloudy; sea, moderate; wire angle, 0°.

0	19.70	33.69	0	19.70	33.69	23.86	405.4	0.000
10	19.63	33.69	10	19.63	33.69	23.88	403.9	0.040
25	19.53	33.68	20	19.55	33.68	23.89	403.0	0.081
50	13.95	33.28	30	19.10	33.64	23.98	395.4	0.121
75	12.36	33.48	50	13.95	33.28	24.89	308.7	0.191
99	11.15	33.63	75	12.36	33.48	25.36	264.5	0.263
123	11.47	34.00	100	11.11	33.64	25.72	231.1	0.325
153	9.66	33.91	150	9.70	33.91	26.17	188.3	0.430
201	10.06	34.31	200	10.02	34.30	26.42	165.8	0.887
249	9.89	34.49	250	9.86	34.49	26.60	150.2	0.597
298	8.53	34.31	300	(8.44)	(34.30)	(26.68)	(142.7)	(0.671)

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
E. W. SCRIPPS; November 15, 1950; 0500 GCT; 27°45'N, 115°34'W; sounding, 1,060 fm; wind, 360°, force 3; weather, partly cloudy; sea, missing; wire angle, 0°.													120.45K-13
0	19.68	33.71			0	19.68	33.71			23.88	403.6	0.000	
10	19.68	33.68			10	19.68	33.68			23.86	406.0	0.040	
25	19.64	33.69			20	19.67	33.69			23.87	405.3	0.081	
50	15.45	33.22			30	19.66	33.69			23.87	405.5	0.122	
75	12.53	33.49			50	15.45	33.22			24.53	343.6	0.197	
99	11.29	33.60			75	12.53	33.49			25.34	266.7	0.273	
123	10.99	33.93			100	11.30	33.61			25.66	236.3	0.336	
154	9.68	33.97			150	9.75	33.95			26.19	186.3	0.442	
202	10.06	34.34			200	10.07	34.32			26.43	165.4	0.529	
252	9.91	34.49			250	9.94	34.49			26.58	151.6	0.608	
301	8.45	34.27			300	8.53	34.29			26.66	144.9	0.683	
E. W. SCRIPPS; November 15, 1950; 0800 GCT; 27°45'N, 115°34'W; sounding, 1,100 fm; wind, 340°, force 3; weather, clear; sea, missing; wire angle, 1°.													120.45K-14
0	19.64	33.68			0	19.64	33.68			23.87	404.6	0.000	
10	19.64	33.69			10	19.64	33.69			23.88	404.3	0.040	
25	19.65	33.71			20	19.64	33.71			23.89	403.1	0.081	
51	13.64	33.21			30	19.65	33.71			23.89	403.8	0.121	
76	12.80	33.53			50	13.71	33.21			24.89	309.1	0.192	
100	11.44	33.67			75	12.87	33.52			25.29	271.0	0.265	
125	10.29	33.89			100	11.44	33.67			25.68	234.4	0.328	
154	9.84	34.00			150	9.89	33.99			26.20	185.5	0.434	
202	10.08	34.40			200	10.08	34.39			26.48	160.3	0.520	
250	9.88	34.52u			250	9.89	34.50			26.60	149.9	0.597	
299	8.30	34.29			300	(8.23)	(34.28)			(26.70)	(141.1)	(0.670)	
E. W. SCRIPPS; November 15, 1950; 1100 GCT; 27°45'N, 115°34'W; sounding, 1,060 fm; wind, 360°, force 3; weather, partly cloudy; sea, missing; wire angle, 0°.													120.45K-15
0	19.61	33.68			0	19.61	33.68			23.88	404.0	0.000	
10	19.61	33.70			10	19.61	33.70			23.89	402.8	0.040	
25	19.56	33.71			20	19.57	33.71			23.91	401.5	0.081	
50	13.55	33.33			30	19.11	33.67			24.00	393.5	0.120	
75	12.20	33.60			50	13.55	33.33			25.01	297.3	0.189	
99	11.66	33.93			75	12.21	33.60			25.48	252.8	0.258	
154	9.38	34.00			100	11.66	33.94			25.85	218.2	0.317	
202	10.08	34.45			150	9.40	34.00			26.29	177.1	0.416	
300	8.44	34.34			200	10.10	34.44			26.52	156.9	0.499	
402	7.39	34.38			250	9.81	34.48			26.60	150.2	0.576	
477	7.33	34.39			300	8.44	34.34			26.71	139.8	0.649	
599	5.86	34.43			400	7.39	34.38			26.90	123.0	0.780	
805	4.83	34.45			500	7.18	34.41			26.95	119.4	0.901	
1002	4.08	34.51			600	5.86	34.43			27.14	101.8	1.012	
1205	3.52	34.53			700	5.30	34.44			27.22	94.6	1.110	
					800	4.88	34.45			27.28	89.7	1.202	
					1000	4.07	34.51			27.41	77.2	1.369	
E. W. SCRIPPS; November 15, 1950; 1400 GCT; 27°45'N, 115°34'W; sounding, 1,030 fm; wind, 345°, force 2; weather, partly cloudy; sea, moderate; wire angle, 0°.													120.45K-16
0	19.57	33.71			0	19.57	33.71			23.91	400.8	0.000	
10	19.59	33.70			10	19.59	33.70			23.90	402.3	0.040	
25	19.61	33.69			20	19.60	33.70			23.90	402.9	0.080	
50	15.29	33.30			30	19.62	33.69			23.88	404.4	0.121	
75	12.76	33.58			50	15.29	33.30			24.62	334.5	0.195	
125p	10.00	33.82			75	12.76	33.58			25.36	264.4	0.270	
171p	9.45	33.95			100	10.75	33.67			25.81	222.4	0.330	
219p	9.64	34.25			150	9.64	33.86			26.14	191.2	0.434	
					200	9.53	34.12			26.37	171.0	0.524	

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

120.45K-17 E. W. SCRIPPS; November 15, 1950; 1700 GCT; 27°45'N, 115°34'W; sounding, 1,030 fm; wind, 345°, force 3; weather, partly cloudy; sea, moderate; wire angle, 0°.

0	19.60	33.66	0	19.60	33.66	23.86	405.2	0.000
10	19.59	33.69	10	19.59	33.69	23.89	403.0	0.040
25	19.60	33.66	20	19.60	33.67	23.87	405.1	0.081
50	14.16	33.27	30	19.60	33.66	23.86	406.2	0.121
75	12.33	33.57	50	14.16	33.27	24.84	313.7	0.193
99	10.93	33.70	75	12.33	33.57	25.44	257.1	0.265
123	10.38	33.72	100	10.89	33.70	25.81	222.4	0.325
152	9.82	33.98	150	9.86	33.97	26.19	186.5	0.427
199	9.54	34.20	200	9.54	34.20	26.42	165.5	0.515
248	9.98	34.52u	250	9.91	34.49	26.59	151.1	0.593
298	8.52	34.31	300	(8.46)	(34.30)	(26.68)	(143.0)	(0.668)

120.45K-18 E. W. SCRIPPS; November 15, 1950; 2000 GCT; 27°45'N, 115°34'W; sounding, 1,030 fm; wind, 350°, force 3; weather, partly cloudy; sea, moderate; wire angle, 0°.

0	19.69	33.78	0	19.69	33.78	23.93	398.7	0.000
10	19.64	33.68	10	19.64	33.68	23.87	404.9	0.040
25	19.61	33.69	20	19.63	33.69	23.88	404.2	0.081
50	14.72	33.26	30	19.62	33.69	23.88	404.4	0.121
75	12.32	33.56	50	14.72	33.26	24.71	325.6	0.194
100	10.85	33.65	75	12.32	33.56	25.43	257.7	0.267
124	10.30	33.78	100	10.85	33.65	25.77	225.6	0.327
153	9.58	33.89	150	9.62	33.88	26.16	189.4	0.432
202	9.58	34.27	200	9.54	34.26	26.47	161.1	0.519
250	9.88	34.49	250	9.88	34.49	26.60	150.5	0.596
298	8.65	34.37	300	(8.60)	(34.37)	(26.71)	(139.9)	(0.670)

120.45K-19 E. W. SCRIPPS; November 15, 1950; 2305 GCT; 27°45'N, 115°34'W; sounding, 1,060 fm; wind, 340°, force 4; weather, partly cloudy; sea, moderate; wire angle, 0°.

0	19.70	33.72	0	19.70	33.72	23.88	403.3	0.000
10	19.70	33.66	10	19.70	33.66	23.84	407.9	0.041
25	19.62	33.66	20	19.65	33.66	23.85	407.0	0.081
50	13.90	33.30	30	19.61	33.66	23.86	406.5	0.122
75	12.14	33.53	50	13.90	33.30	24.92	306.3	0.193
101	10.92	33.65	75	12.14	33.53	25.44	256.7	0.264
155	9.37	33.96	100	11.00	33.64	25.74	228.9	0.324
203	9.55	34.31	150	9.40	33.94	26.25	181.5	0.427
301	8.68	34.42u	200	9.54	34.28	26.49	159.5	0.512
404	7.24	34.40	250	9.60	(34.47)	(26.63)	(147.4)	(0.588)
604	5.92	34.42	300	8.71	(34.36)	(26.68)	(142.5)	(0.661)
805	4.73	34.45	400	7.29	(34.40)	(26.93)	(120.1)	(0.793)
1002	3.96	34.61r	500	6.49	34.41	27.05	109.7	(0.908)
1206	3.46	34.54	600	5.93	34.42	27.13	102.9	(1.014)
			700	5.35	34.43	27.20	96.0	(1.113)
			800	4.74	34.45	27.29	87.9	(1.205)
			1000	3.95	34.50	27.42	76.6	(1.370)

120.45K-20 E. W. SCRIPPS; November 16, 1950; 0206 GCT; 27°45'N, 115°34'W; sounding, 1,100 fm; wind, 340°, force 4; weather, partly cloudy; sea, missing; wire angle, 1°.

0	19.62	33.69	0	19.62	33.69	23.88	403.4	0.000
10	19.62	33.69	10	19.62	33.69	23.88	403.7	0.040
25	19.64	33.75	20	19.64	33.73	23.91	401.7	0.081
50	14.68	33.30	30	19.13	33.71	24.02	390.9	0.120
75	13.00	33.60	50	14.68	33.30	24.75	321.9	0.192
99	11.60	33.71	75	13.00	33.60	25.33	267.5	0.265
123	10.37	33.68	100	11.49	33.71	25.70	232.2	0.328
152	9.72	33.98	150	9.74	33.97	26.21	184.7	0.432
202	9.60	34.34	200	9.61	34.33	26.51	156.9	0.517
251	9.99	34.56u	250	9.98				
300	9.36	34.57u	300	9.36				

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

E. W. SCRIPPS; November 16, 1950; 0500 GCT; 27°45'N, 115°34'W; sounding, 1,090 fm; wind, 340°, force 4; weather, clear; sea, missing; wire angle, 0°. 120.45K-21

0	19.61	33.75	0	19.61	33.75		23.93	399.0	0.000
10	19.62	33.68	10	19.62	33.68		23.87	404.4	0.040
25	19.63	33.69	20	19.63	33.69		23.88	404.2	0.081
50	14.01	33.37	30	19.64	33.69		23.88	404.9	0.121
75	13.07	33.52	50	14.01	33.37		24.95	303.4	0.192
99	11.38	33.71	75	13.07	33.52		25.25	274.9	0.264
123	10.21	33.81	100	11.28	33.72		25.75	228.0	0.327
153	9.66	33.95	150	9.69	33.94		26.20	185.9	0.431
201	9.96	34.31	200	9.95	34.31		26.44	163.8	0.518
249	9.97	34.51u	250	9.96					
298	9.43	34.49u	300	(9.42)					

E. W. SCRIPPS; November 16, 1950; 0800 GCT; 27°45'N, 115°34'W; sounding, 1,030 fm; wind, 330°, force 4; weather, clear; sea, rough; wire angle, 0°. 120.45K-22

0	19.57	33.67	0	19.57	33.67		23.88	403.8	0.000
10	19.60	33.68	10	19.60	33.68		23.88	404.0	0.040
25	19.59	33.79	20	19.60	33.76		23.94	398.6	0.080
50	14.60	33.46	30	19.58	33.79		23.97	396.4	0.120
75	12.56	33.58	50	14.60	33.46		24.89	308.6	0.191
100	11.16	33.62	75	12.56	33.58		25.40	260.8	0.262
124	10.00	33.95	100	11.16	33.62		25.69	233.3	0.324
153	9.43	34.11	150	9.43	34.10		26.37	170.1	0.425
202	10.04	34.53u	200	10.06	34.46		26.54	154.7	0.506
251	9.64	34.47	250	9.67	34.46		26.61	149.4	0.581
300	8.40	34.36	300	8.40	34.36		26.73	137.8	0.654

E. W. SCRIPPS; November 16, 1950; 1100 GCT; 27°45'N, 115°34'W; sounding, 1,030 fm; wind, 330°, force 4; weather, clear; sea, very rough; wire angle, 0°. 120.45K-23

0	19.57	33.78	0	19.57	33.78		23.96	395.9	0.000
10	19.58	33.79	10	19.58	33.79		23.97	395.7	0.040
25	19.58	33.69	20	19.58	33.72		23.91	401.0	0.079
50	14.64	33.46	30	19.58	33.68		23.89	404.2	0.120
75	12.88	33.64	50	14.64	33.46		24.88	309.5	0.191
100	10.80	33.69	75	12.88	33.64		25.38	262.4	0.263
154	9.44	34.05	100	10.80	33.69		25.81	221.8	0.323
204	9.93	34.47	150	9.51	33.98		26.26	180.2	0.424
302	8.93	34.43u	200	9.90	34.46		26.57	152.0	0.506
404	7.75	34.42u	250	9.58	(34.49)		(26.64)	(145.7)	(0.580)
501	6.70	34.43u	300	8.94	(34.40)		(26.68)	(143.0)	(0.653)
603	5.77	34.48u	400	7.78	(34.36)		(26.83)	(130.1)	(0.790)
804	4.75	34.56u	500	6.70	(34.41)		(27.02)	(112.6)	(0.911)
1000	4.06	34.56u	600	5.78	(34.43)		(27.15)	(100.5)	(1.018)
1205	3.48	34.54	700	5.20	(34.44)		(27.23)	(93.3)	(1.114)
			800	4.74	(34.46)		(27.30)	(87.1)	(1.205)
			1000	4.06	(34.49)		(27.40)	(78.4)	(1.370)

E. W. SCRIPPS; November 16, 1950; 1400 GCT; 27°45'N, 115°34'W; sounding, 1,030 fm; wind, 340°, force 5; weather, partly cloudy; sea, very rough; wire angle, 0°. 120.45K-24

0	19.55	33.82	0	19.55	33.82		24.00	392.5	0.000
10	19.55	33.80	10	19.55	33.80		23.99	393.9	0.039
25	19.55	33.75	20	19.55	33.77		23.96	396.5	0.079
50	16.27	33.57	30	19.55	33.75		23.95	398.3	0.119
75	12.68	33.55	50	16.27	33.57		24.61	335.9	0.192
100	11.19	33.68	75	12.68	33.55		25.35	265.2	0.267
124	10.13	33.86	100	11.19	33.68		25.73	229.4	0.329
153	9.60	34.09	150	9.61	34.08		26.32	174.7	0.430
203	9.92	34.49	200	9.90	34.48		26.58	150.5	0.511
251	9.56	34.51	250	9.56	34.51		26.66	143.8	0.584
302	9.20	34.51u	300	9.21					

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

120.45K-25 E. W. SCRIPPS; November 16, 1950; 1705 GCT; 27°45'N, 115°34'W; sounding, 1,100 fm; wind, 360°, force 4; weather, partly cloudy; sea, moderate; wire angle, 0°.

0	19.56	33.82	0	19.56	33.82	24.00	392.5	0.000
10	19.55	33.71	10	19.55	33.71	23.92	400.6	0.040
25	19.56	33.75	20	19.55	33.74	23.94	398.8	0.080
50	14.85	33.37	30	19.55	33.75	23.95	398.3	0.120
75	12.70	33.48	50	14.85	33.37	24.77	320.3	0.191
99	11.09	33.77	75	12.70	33.48	25.29	270.7	0.265
123	10.13	33.84	100	11.02	33.78	25.84	218.8	0.326
153	9.63	34.02	150	9.67	34.02	26.26	179.8	0.426
201	9.88	34.42	200	9.89	34.41	26.53	155.5	0.510
249	9.74	34.51	250	9.71	34.51	26.64	146.4	0.585
299	9.12	34.47u	300	(9.10)				

120.45K-26 E. W. SCRIPPS; November 16, 1950; 2000 GCT; 27°45'N, 115°34'W; sounding, 1,090 fm; wind, 360°, force 4; weather, partly cloudy; sea, missing; wire angle, 0°.

0	19.61	33.71	0	19.61	33.71	23.90	401.8	0.000
10	19.57	33.68	10	19.57	33.68	23.89	403.3	0.040
25	19.55	33.69	20	19.55	33.69	23.90	402.3	0.081
50	14.59	33.37	30	19.54	33.69	23.90	402.5	0.121
76	12.10	33.49	50	14.59	33.37	24.83	314.9	0.193
100	10.76	33.68	75	12.21	33.48	25.39	261.5	0.265
124	10.13	33.85	100	10.76	33.68	25.81	221.9	0.325
153	9.50	33.98	150	9.53	33.96	26.24	182.0	0.426
202	9.49	34.25	200	9.49	34.24	26.46	161.6	0.512
251	9.98	34.51	250	9.97	34.51	26.60	150.6	0.589
301	9.08	34.40	300	9.18	34.40	26.64	146.9	0.664

120.45K-27 E. W. SCRIPPS; November 16, 1950; 2300 GCT; 27°45'N, 115°34'W; sounding, 1,100 fm; wind, 360°, force 5; weather, partly cloudy; sea, rough; wire angle, 0°.

0	19.57	33.68	0	19.57	33.68	23.89	403.0	0.000
10	19.58	33.71	10	19.58	33.71	23.91	401.4	0.040
25	19.52	33.64	20	19.55	33.66	23.88	404.6	0.080
50	14.93	33.46	30	19.26	33.62	23.92	400.7	0.121
76	11.94	33.55	50	14.93	33.46	24.82	315.1	0.192
101	10.89	33.66	75	12.00	33.55	25.48	252.6	0.263
155	9.53	34.09	100	10.92	33.66	25.77	226.1	0.323
204	9.46	34.23	150	9.58	34.07	26.32	174.7	0.424
302	8.98	34.43	200	9.46	34.23	26.46	161.9	0.507
404	6.97	34.27u	250	9.84	34.49	26.60	149.9	0.585
502	6.75	34.42u	300	9.00	34.43	26.69	141.8	0.658
605	5.98	34.47u	400	6.97				
807	4.75	34.58u	500	6.74				
1003	3.94	34.45u	600	5.95				
1207	3.44	34.61u	700	5.30				
			800	4.78				
			1000	3.94				

120.45K-28 E. W. SCRIPPS; November 17, 1950; 0200 GCT; 27°45'N, 115°34'W; sounding, 1,030 fm; wind, 340°, force 5; weather, partly cloudy; sea, very rough; wire angle, 0°.

0	19.51	33.75	0	19.51	33.75	23.96	396.3	0.000
10	19.50	33.62	10	19.50	33.62	23.86	405.8	0.040
25	19.53	33.68	20	19.51	33.66	23.89	403.3	0.081
50	15.11	33.60u	30	19.20	33.67	23.98	395.6	0.121
75	12.19	33.53	50	15.11	33.40	24.74	323.4	0.192
99	11.44	33.69	75	12.19	33.53	25.43	257.6	0.265
123	10.18	33.71	100	11.40	33.69	25.70	232.2	0.326
152	9.59	34.04	150	9.60	34.03	26.28	177.9	0.429
200	9.89	34.38	200	9.89	34.38	26.51	157.7	0.513
249	9.99	34.52u	250	9.98				
298	8.93	34.43u	300	(8.87)				

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

E. W. SCRIPPS; November 17, 1950; 0500 GCT; 27°45'N, 115°34'W; sounding, 1,030 fm; wind, 340°, force 6; weather, partly cloudy; sea, very rough; wire angle, 0°. 120.45K-29

0	19.49	33.73	0	19.49	33.73	23.95	397.2	0.000
10	19.48	33.66	10	19.48	33.66	23.90	402.5	0.040
25	19.50	33.64	20	19.49	33.65	23.89	403.6	0.080
50	15.63	33.26	30	19.50	33.64	23.88	405.0	0.121
74	12.76	33.35	50	15.63	33.26	24.52	344.5	0.196
98	11.53	33.62	75	12.75	33.36	25.19	280.4	0.274
122	10.23	33.80	100	11.39	33.62	25.65	237.2	0.338
151	9.64	33.94	150	9.68	33.94	26.20	185.8	0.445
200	9.98	34.29	200	9.98	34.29	26.42	165.8	0.532
250	9.98	34.51	250	9.98	34.51	26.59	150.8	0.611
299	9.01	34.49u	300	(8.99)				

E. W. SCRIPPS; November 17, 1950; 0800 GCT; 27°45'N, 115°34'W; sounding, 1,030 fm; wind, 345°, force 6; weather, clear; sea, high; wire angle, 0°. 120.45K-30

0	19.43	33.71	0	19.43	33.71	23.95	397.2	0.000
10	19.42	33.73	10	19.42	33.73	23.97	395.8	0.040
25	19.42	33.64	20	19.42	33.67	23.92	400.5	0.079
50	15.11	33.38	30	19.42	33.64	23.90	403.1	0.120
75	12.66	33.53	50	15.11	33.38	24.72	324.9	0.192
100	10.96	33.73	75	12.66	33.53	25.34	266.4	0.266
125	10.02	33.94	100	10.96	33.73	25.82	221.5	0.327
203	9.92	34.43	150	9.95	34.17	26.33	173.3	0.426
250	9.75	34.47u	200	9.90	34.43	26.55	154.2	0.508
298	9.03	34.35u	250	9.75				
			300	(9.00)				

E. W. SCRIPPS; November 17, 1950; 1113 GCT; 27°45'N, 115°34'W; sounding, 1,090 fm; wind, 340°, force 5; weather, clear; sea, very rough; wire angle, 1°. 120.45K-31

0	19.41	33.66	0	19.41	33.66	23.91	400.5	0.000
10	19.40	33.71	10	19.40	33.71	23.95	396.9	0.040
25	19.40	33.75	20	19.40	33.74	23.98	395.0	0.079
50	14.96	33.55	30	19.40	33.75	23.98	394.7	0.119
76	12.11	33.48	50	14.96	33.55	24.88	309.4	0.189
100	10.92	33.60	75	12.20	33.48	25.39	261.3	0.261
154	9.55	34.02	100	10.92	33.60	25.72	230.5	0.322
301	8.92	34.40	150	9.60	34.00	26.26	180.2	0.425
404	7.00	34.34u	200	9.65	34.18	26.39	168.7	0.512
502	6.72	34.47u	250	9.80	34.49	26.61	149.3	0.591
605	5.86	34.41	300	8.94	34.40	26.68	143.2	0.665
806	4.73	34.43u	400	7.06	(34.38)	(26.94)	(118.4)	(0.796)
1003	4.04	34.49	500	6.90	(34.39)	(26.97)	(117.0)	(0.913)
1208	3.46	34.52	600	5.90	34.41	(27.12)	(103.3)	(1.023)
			700	5.00	34.43	(27.25)	(91.4)	(1.121)
			800	4.78	34.46	(27.29)	(87.7)	(1.210)
			1000	4.08	34.49	(27.40)	(78.8)	(1.377)

SIO

CCOFI 5011

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

120.45K-32 E. W. SCRIPPS; November 17, 1950; 1400 GCT; 27°45'N, 115°34'W; sounding, 1,090 fm; wind, 360°, force 5; weather, clear; sea, very rough; wire angle, 0°.

0	19.35	33.64	0	19.35	33.64	23.91	400.5	0.000
10	19.36	33.68	10	19.36	33.68	23.94	398.1	0.040
25	19.37	33.58	20	19.37	33.61	23.89	403.8	0.080
50	15.05	33.57	30	19.38	33.58	23.86	406.6	0.121
75	12.23	33.48	50	15.05	33.57	24.88	309.9	0.192
100	10.78	33.60	75	12.23	33.48	25.39	261.9	0.264
125	9.91	33.91	100	10.78	33.60	25.74	228.3	0.325
154	9.47	34.04	150	9.47	34.04	26.31	175.2	0.426
203	9.81	34.33	200	9.80	34.32	26.47	160.9	0.510
250	9.69	34.42u	250	9.69				
298	9.10	34.47u	300	(9.07)				

120.45K-33 E. W. SCRIPPS; November 17, 1950; 1700 GCT; 27°45'N, 115°34'W; sounding, 1,090 fm; wind, 340°, force 5; weather, clear; sea, very rough; wire angle, 0°.

0	19.35	33.66	0	19.35	33.66	23.93	399.0	0.000
10	19.33	33.62	10	19.33	33.62	23.90	401.7	0.040
25	19.35	33.68	20	19.34	33.66	23.93	399.4	0.080
50	15.40	33.19	30	19.35	33.68	23.94	398.7	0.120
75	12.18	33.42	50	15.40	33.19	24.51	344.9	0.194
100	10.95	33.62	75	12.18	33.42	25.35	265.5	0.271
126	10.15	33.82	100	10.95	33.62	25.73	229.6	0.333
155	9.60	33.96	150	9.64	33.94	26.21	185.2	0.437
202	9.88	34.36	200	9.89	34.35	26.48	159.9	0.523
249	9.79	34.40u	250	9.78				
298	9.26	34.40u	300	(9.24)				

120.45K-34 E. W. SCRIPPS; November 17, 1950; 2000 GCT; 27°45'N, 115°34'W; sounding, 1,030 fm; wind, 330°, force 6; weather, partly cloudy; sea, high; wire angle, 0°.

0	19.36	33.60	0	19.36	33.60	23.88	403.8	0.000
10	19.33	33.69	10	19.33	33.69	23.96	396.6	0.040
25	19.31	33.69	20	19.32	33.69	23.96	396.6	0.080
50	15.25	33.17	30	19.31	33.69	23.96	396.8	0.119
74	12.36	33.48	50	15.25	33.17	24.53	343.1	0.193
98	11.01	33.57	75	12.32	33.48	25.37	263.6	0.269
123	10.17	33.77	100	10.96	33.58	25.70	232.6	0.331
152	9.70	33.98	150	9.72	33.96	26.21	185.0	0.436
202	9.46	34.25	200	9.44	34.24	26.47	160.9	0.522
251	9.87	34.49	250	9.88	34.49	26.59	150.5	0.599
301	9.16	34.47u	300	9.17				

120.45K-35 E. W. SCRIPPS; November 17, 1950; 2304 GCT; 27°45'N, 115°34'W; sounding, 1,030 fm; wind, 340°, force 6; weather, clear; sea, high; wire angle, 0°.

0	19.38	33.66	0	19.38	33.66	23.92	399.9	0.000
10	19.35	33.64	10	19.35	33.64	23.91	400.9	0.040
25	19.16	33.66	20	19.25	33.66	23.95	397.2	0.080
50	15.23	33.60	30	18.60	33.58	24.06	387.8	0.119
74	12.84	33.53	50	15.23	33.60	24.86	311.3	0.189
99	11.15	33.61	75	12.85	33.53	25.30	269.8	0.262
123	10.23	33.80	100	11.09	33.62	25.70	232.1	0.324
151	9.76	34.07	150	9.76	34.06	26.28	178.4	0.427
198	9.85	34.32	200	9.86	34.32	26.46	161.8	0.512
247	9.88	34.46	250	9.85	34.47	26.58	151.5	0.590
296	9.16	34.48u	300	(9.09)				

POFI
HMS-2

OBSERVED					COMPUTED	INTERPOLATED				COMPUTED	
Z	T	S	O_2	PO_4-P	σ_t	Z	T	S	σ_t	ΔD	
m	°C	‰	ml/L	µg at/L	g/L	m	°C	‰	g/L	dyn. m	
HUGH M. SMITH; January 26, 1950; 2107 GCT; 23°54'N, 166°44'W; wind, 110°, force 2; weather, partly cloudy; sea, smooth; wire angle, 20°.											1
0	22.8	35.26	4.91	0.40	24.21	0	22.80	35.26	24.21	0.000	
9	22.60	35.25	5.02	0.28	24.26	10	22.62	35.25	24.25	0.037	
44	22.60	35.25	4.92	0.26	24.26	20	22.60	35.25	24.26	0.074	
87	22.30	35.25	4.75	0.33	24.34	30	22.60	35.25	24.26	0.111	
174	18.12	34.90	4.63	0.48	25.18	50	22.03	35.23	24.40	0.183	
262	14.95	34.56	4.74	0.72	25.66	75	21.12	35.18	24.62	0.269	
351	11.78	34.33	4.68	0.98	26.13	100	20.30	35.10	24.78	0.352	
530	7.52	34.05	3.36	2.00	26.62	150	18.80	34.97	25.07	0.506	
711	5.15	34.16	1.53	2.72	27.01	200	17.30	34.81	25.32	0.648	
893	4.14	34.25	1.02	3.08	27.09	250	15.45	34.61	25.59	0.778	
						300	13.50	34.45	25.88	0.895	
						400	10.35	34.21	26.30	1.096	
						500	8.07	34.06	26.55	1.267	
						600	6.44	34.08	26.79	1.413	
						700	5.28	34.16	27.00	1.538	
						800	4.57	34.21	27.12	1.647	
						1000	(4.00)	(34.26)	(27.22)	(1.845)	
HUGH M. SMITH; January 27, 1950; 0504 GCT; 23°10'N, 167°00'W; wind, calm; weather, partly cloudy; sea, calm; wire angle, 0°.											2
0	23.4	35.32	4.68	0.40	24.08	0	23.40	35.32	24.08	0.000	
10	23.12	35.32	4.68	0.27	24.16	10	23.12	35.32	24.16	0.038	
49	23.02	35.28	4.67	0.21	24.16	20	23.08	35.29	24.15	0.076	
98	23.02	35.30	4.74	0.24	24.18	30	23.06	35.28	24.15	0.114	
196	18.23	34.90	4.38	0.52	25.16	50	23.02	35.28	24.16	0.189	
294	13.02	34.36	4.24	1.08	25.91	75	23.02	35.30	24.18	0.284	
392	10.10	34.14	4.05	1.35	26.28	100	23.00	35.30	24.18	0.379	
590	6.13	34.13	1.66	2.77	26.87	150	20.80	35.15	24.68	0.556	
788	4.62	34.31	1.01	3.08	27.19	200	18.00	34.88	25.20	0.711	
986	4.02	34.47	1.69	3.08	27.39	250	15.30	34.58	25.60	0.843	
1482	2.77	34.56	1.24	2.94	27.57	300	12.85	34.35	25.94	0.959	
						400	9.90	34.12	26.30	1.157	
						500	7.70	34.06	26.60	1.324	
						600	6.00	34.14	26.90	1.462	
						700	5.18	34.23	27.07	1.579	
						800	4.60	34.32	27.20	1.681	
						1000	4.03	34.47	27.38	1.855	
HUGH M. SMITH; January 28, 1950; 0007 GCT; 20°59'N, 168°16'W; wind, 010°, force 2; weather, partly cloudy; sea, smooth; wire angle, 0°.											3
0	24.2	35.25	4.94	0.30	23.79	0	24.20	35.25	23.79	0.000	
10	23.50	35.21	4.85	0.37	23.97	10	23.50	35.21	23.97	0.040	
49	23.40	35.25	4.84	0.38	24.03	20	23.48	35.21	23.97	0.080	
98	23.04	35.23	4.84	0.40	24.12	30	23.47	35.22	23.98	0.119	
195	17.11	34.78	4.48	0.76	25.34	50	23.40	35.25	24.03	0.198	
292	12.62	34.34	-	-	25.98	75	23.36	35.25	24.04	0.296	
390	8.89	34.09	3.67	1.83	26.44	100	23.02	35.23	24.12	0.393	
586	5.70	34.18	1.51	2.96	26.96	150	20.18	35.06	24.78	0.569	
784	4.72	34.36	1.08	3.10	27.22	200	16.89	34.75	25.37	0.717	
982	4.02	34.47	1.58	3.14	27.39	250	14.43	34.50	25.73	0.843	
1480	2.74	34.56	1.89	2.92	27.58	300	12.32	34.32	26.02	0.953	
						400	8.62	34.08	26.48	1.138	
						500	6.70	34.10	26.77	1.288	
						600	5.60	34.20	26.99	1.413	
						700	5.10	34.28	27.12	1.522	
						800	4.68	34.37	27.23	1.620	
						1000	4.00	34.47	27.39	1.792	

POFI

HMS-2

OBSERVED					COMPUTED	INTERPOLATED				COMPUTED
Z	T	S	O_2	PO_4-P	σ_t	Z	T	S	σ_t	ΔD
m	°C	‰	ml/L	μg at/L	g/L	m	°C	‰	g/L	dyn. m
4	HUGH M. SMITH; January 28, 1950; 1824 GCT; 18°55'N, 169°18'W; wind, 350°, force 6; weather, cloudy; sea, very rough; wire angle, 50°.									
0	24.2	35.14	4.91	0.35	23.71	0	24.20	35.14	23.71	0.000
78	23.79	35.23	4.81	0.27	23.90	10	24.20	35.14	23.71	0.042
107	23.30	35.25	4.76	0.25	24.06	20	24.20	35.14	23.71	0.084
143	20.96	35.14	4.33	0.41	24.63	30	24.17	35.16	23.73	0.126
217	16.06	34.65	4.30	0.80	25.48	50	24.08	35.19	23.78	0.209
293	12.57	34.34	4.47	1.00	25.99	75	23.80	35.23	23.90	0.312
370	9.43	34.14	3.99	1.33	26.39	100	23.44	35.25	24.02	0.412
524	6.23	34.14	1.80	2.68	26.87	150	20.80	35.13	24.67	0.594
681	5.26	34.36	1.18	3.08	27.16	200	16.80	34.72	25.37	0.744
842	4.87	34.45	1.45	3.02	27.28	250	14.54	34.52	25.72	0.870
1272	3.31	34.52	1.70	2.96	27.49	300	12.28	34.32	26.03	0.980
						400	8.56	34.10	26.50	1.164
						500	6.55	34.12	26.81	1.311
						600	5.62	34.27	27.05	1.432
						700	5.20	34.38	27.18	1.535
						800	4.96	34.43	27.25	1.630
						1000	4.19	34.52	27.41	1.799
5	HUGH M. SMITH; January 29, 1950; 1047 GCT; 17°03'N, 170°07'W; wind, 050°, force 7; weather, cloudy; sea, very rough; wire angle, 50°.									
0	24.5	34.94	4.86	0.44	23.47	0	24.50	34.94	23.47	0.000
99	23.30	34.92	4.85	0.40	23.81	10	24.47	34.94	23.48	0.044
132	20.78	34.88	4.43	0.49	24.48	20	24.44	34.94	23.49	0.088
197	16.71	34.60	3.94	0.87	25.29	30	24.42	34.94	23.49	0.133
264	12.09	34.29	4.11	1.36	26.04	50	24.40	34.94	23.50	0.221
329	9.83	34.31	1.79	2.30	26.46	75	24.36	34.94	23.51	0.331
460	7.47	34.29	1.19	2.83	26.81	100	23.30	34.92	23.81	0.438
591	6.06	34.40	1.02	3.11	27.09	150	19.49	34.81	24.77	0.623
739	5.34	34.42	1.00	3.12	27.20	200	16.60	34.59	25.31	0.772
1193	3.48	34.51	1.46	3.11	27.47	250	13.50	34.38	25.83	0.896
						300	10.94	34.22	26.20	1.000
						400	8.38	34.20	26.61	1.170
						500	7.00	34.34	26.92	1.306
						600	6.00	34.40	27.10	1.420
						700	5.50	34.41	27.17	1.522
						800	5.07	34.44	27.25	1.618
						1000	4.27	34.50	27.38	1.790
6	HUGH M. SMITH; January 30, 1950; 0312, 0407 GCT; 15°00'N, 171°06'W; wind, 080°, force 5; weather, cloudy; sea, rough; wire angle, 25°, 25°.									
0	25.1	34.92	4.81	0.46	23.27	0	25.10	34.92	23.27	0.000
9	25.02	34.88	4.73	0.42	23.26	10	25.02	34.88	23.27	0.046
43	24.90	34.90	4.71	0.42	23.32	20	24.98	34.88	23.28	0.092
86	24.89	34.94	4.75	0.46	23.35	30	24.93	34.88	23.29	0.139
172	20.12	34.97	4.47	0.58	24.72	50	24.90	34.90	23.32	0.230
258	12.62	34.27	3.53	1.51	25.92	75	24.90	34.90	23.32	0.345
345	9.07	34.18	2.48	2.21	26.48	100	24.60	34.95	23.45	0.459
522	6.40	34.45	0.81	3.00	27.09	150	21.12	34.97	24.46	0.660
705	5.36	34.47	0.86	3.23	27.23	200	18.65	34.83	25.00	0.824
888	4.58	34.49	1.08	3.25	27.34	250	13.50	34.34	25.80	0.957
						300	10.40	34.17	26.26	1.059
1348	3.02	34.54	1.70	3.20	27.54	400	8.02	34.29	26.73	1.221
						500	6.64	34.45	27.06	1.344
						600	5.93	34.46	27.16	1.449
						700	5.40	34.46	27.22	1.546
						800	4.90	34.48	27.30	1.636
						1000	4.20	34.50	27.39	1.803

OBSERVED					COMPUTED	INTERPOLATED				COMPUTED
Z	T	S	O_2	PO_4-P	σ_t	Z	T	S	σ_t	ΔD
m	°C	‰	ml/L	µg at/L	g/L	m	°C	‰	g/L	dyn. m
HUGH M. SMITH; January 30, 1950; 1332 GCT; 13°51'N, 171°41'W; wind, 110°, force 5; weather, partly cloudy; sea, moderate; wire angle, 20°.										7
0	25.0	34.87	4.93	0.42	23.26	0	25.00	34.87	23.26	0.000
8	25.04	34.83	4.76	0.31	23.22	10	25.03	34.83	23.22	0.046
41	24.99	34.90	4.90	0.31	23.29	20	25.02	34.84	23.24	0.093
82	24.90	34.90	4.85	0.33	23.32	30	25.01	34.85	23.25	0.140
166	20.28	34.97	4.45	0.54	24.68	50	24.97	34.90	23.30	0.232
250	12.52	34.33	3.70	1.42	25.99	75	24.91	34.90	23.31	0.347
334	9.40	34.40	1.40	2.46	26.60	100	24.71	34.93	23.40	0.462
504	7.02	34.45	0.86	2.90	27.01	150	21.93	35.00	24.26	0.668
674	5.67	34.47	1.02	3.08	27.20	200	17.68	34.73	25.16	0.833
847	4.95	34.51	1.08	3.15	27.32	250	12.52	34.33	25.99	0.957
1292	3.31	34.54	1.66	3.04	27.51	300	10.39	34.38	26.42	1.052
						400	8.23	34.43	26.81	1.202
						500	7.07	34.46	27.00	1.324
						600	6.22	34.46	27.12	1.433
						700	5.53	34.48	27.22	1.532
						800	5.12	34.50	27.29	1.624
						1000	4.40	34.52	27.38	1.793
HUGH M. SMITH; January 30, 1950; 2226 GCT; 13°00'N, 172°00'W; wind, 090°, force 6; weather, partly cloudy; sea, moderate; wire angle, 45°.										8
0	25.6	34.61	4.80	0.40	22.88	0	25.60	34.61	22.88	0.000
75	24.94	34.90	4.80	0.30	23.30	10	25.60	34.61	22.88	0.050
102	23.55	35.01	4.79	0.33	23.80	20	25.60	34.61	22.88	0.100
135	21.07	35.03	4.46	0.46	24.52	30	25.58	34.61	22.89	0.150
199	14.90	34.47	3.82	1.12	25.61	50	25.31	34.78	23.10	0.248
263	10.65	34.40	1.81	2.34	26.39	75	24.94	34.90	23.31	0.365
327	9.16	34.40	1.11	2.34	26.64	100	23.85	35.00	23.71	0.476
327	-	-	-	2.70	-	150	20.45	35.00	24.66	0.665
453	7.48	34.47	0.90	2.78	26.95	200	14.70	34.46	25.64	0.809
453	-	-	-	3.01	-	250	10.84	34.40	26.36	0.913
584	6.28	34.49	0.97	3.17	27.14	300	9.76	34.40	26.54	0.995
727	5.48	34.49	1.06	3.18	27.24	400	8.10	34.44	26.84	1.138
1110	3.86	34.52	1.47	3.18	27.44	500	7.03	34.48	27.03	1.258
						600	6.17	34.49	27.15	1.365
						700	5.61	34.49	27.22	1.462
						800	5.10	34.49	27.28	1.554
						1000	4.20	34.51	27.40	1.722
HUGH M. SMITH; January 31, 1950; 0828, 0938 GCT; 12°03'N, 172°04'W; wind, 100°, force 6; weather, cloudy; sea, rough; wire angle, 46°, 52°.										9
0	26.0	34.29	4.79	0.46	22.52	0	26.00	34.29	22.52	0.000
74	25.06	34.81	4.84	0.37	23.20	10	25.92	34.34	22.58	0.053
100	22.73	34.97	4.91	0.45	24.01	20	25.86	34.39	22.64	0.106
133	19.00	34.87	4.29	0.67	24.94	30	25.69	34.50	22.77	0.157
199	11.37	34.40	1.95	2.35	26.26	50	25.40	34.66	22.98	0.257
264	10.04	-	0.83	2.87	-	75	25.04	34.81	23.21	0.378
330	9.30	34.60	0.57	2.86	26.78	100	22.73	34.97	24.01	0.486
463	7.75	34.54	0.63	3.10	26.97	150	16.60	34.64	25.35	0.651
597	6.50	34.51	0.72	3.22	27.12	200	11.34	34.40	26.27	0.764
747	5.38	34.51	1.10	3.20	27.26	250	10.20	34.53	26.57	0.847
						300	9.68	34.58	26.70	0.921
1203	3.57	34.58	1.46	-	27.52	400	8.50	34.58	26.89	1.054
						500	7.38	34.53	27.02	1.173
						600	6.48	34.51	27.12	1.281
						700	5.68	34.51	27.23	1.380
						800	5.04	34.52	27.31	1.470
						1000	4.06	34.55	27.44	1.630

OBSERVED					COMPUTED	INTERPOLATED				COMPUTED
Z	T	S	O_2	PO_4-P	σ_t	Z	T	S	σ_t	ΔD
m	°C	‰	ml/L	µg at/L	g/L	m	°C	‰	g/L	dyn. m
10	HUGH M. SMITH; January 31, 1950; 2025, missing GCT; 11°03'N, 172°00'W; wind, 100°, force 5; weather, cloudy; sea, moderate; wire angle, 30°, missing.									
0	26.4	34.27	4.76	0.38	22.38	0	26.40	34.27	22.38	0.000
93	19.82	34.81	4.70	0.46	24.68	10	26.38	34.27	22.39	0.055
126	14.78	34.45	3.39	1.23	25.61	20	26.36	34.28	22.40	0.109
169	10.91	34.36	2.02	2.14	26.31	30	26.34	34.29	22.41	0.164
253	9.94	34.60	0.50	2.82	26.67	50	26.29	34.30	22.44	0.273
339	8.80	34.65	0.55	3.10	26.90	75	21.35	34.88	24.33	0.386
600	6.17	34.52	0.70	3.20	27.18	100	19.15	34.77	24.83	0.471
775	5.16	34.52	1.02	3.21	27.30	150	11.93	34.35	26.12	0.599
951	4.43	34.56	1.23	3.09	27.41	200	10.42	34.49	26.50	0.687
						250	9.99	34.60	26.66	0.762
1342	3.20	34.60	1.57	3.00	27.57	300	9.39	34.64	26.79	0.831
						400	8.00	34.60	26.98	0.956
						500	7.00	34.54	27.08	1.067
						600	6.17	34.52	27.17	1.170
						700	5.57	34.52	27.25	1.265
						800	5.04	34.53	27.32	1.354
						1000	4.25	34.57	27.44	1.514
11	HUGH M. SMITH; February 1, 1950; 0602 GCT; 10°02'N, 171°55'W; wind, 100°, force 5; weather, partly cloudy; sea, moderate; wire angle, 35°.									
0	26.7	34.22	4.65	0.35	22.25	0	26.70	34.22	22.25	0.000
9	26.56	34.20	4.65	0.27	22.28	10	26.55	34.20	22.28	0.056
40	26.36	34.18	4.63	0.27	22.33	20	26.49	34.19	22.29	0.111
79	22.42	34.90	5.00	0.27	24.04	30	26.41	34.18	22.31	0.167
156	12.25	34.38	2.59	1.80	26.08	50	25.73	34.41	22.69	0.274
235	9.74	34.52	0.74	2.78	26.64	75	23.30	34.89	23.78	0.391
315	8.96	34.60	0.82	2.67	26.83	100	19.50	34.81	24.77	0.483
480	7.29	34.51	0.85	2.94	27.01	150	12.34	34.38	26.06	0.614
651	6.06	34.49	0.90	3.14	27.16	200	10.38	34.44	26.47	0.704
825	5.06	34.52	1.08	3.07	27.31	250	9.59	34.54	26.68	0.780
1286	3.36	34.58	1.82	3.00	27.54	300	9.10	34.58	26.79	0.848
						400	8.03	34.55	26.94	0.974
						500	7.12	34.51	27.04	1.090
						600	6.45	34.49	27.11	1.198
						700	5.75	34.50	27.21	1.298
						800	5.20	34.52	27.29	1.390
						1000	4.20	34.57	27.45	1.552
12	HUGH M. SMITH; February 1, 1950; 1600 GCT; 09°00'N, 172°00'W; wind, 110°, force 5; weather, partly cloudy; sea, moderate; wire angle, 15°.									
0	27.1	34.31	4.65	0.45	22.19	0	27.10	34.31	22.19	0.000
10	27.26	34.33	4.58	0.38	22.15	10	27.26	34.33	22.15	0.057
48	27.15	34.45	4.63	0.41	22.28	20	27.23	34.37	22.19	0.113
96	19.79	34.83	4.04	0.71	24.71	30	27.20	34.40	22.22	0.170
190	10.95	34.63	0.67	2.60	26.52	50	27.10	34.47	22.31	0.282
281	9.72	34.65	0.75	2.83	26.75	75	23.60	34.89	23.70	0.404
373	9.04	34.63	0.64	2.82	26.84	100	19.12	34.79	24.85	0.496
558	7.00	34.52	0.65	-	27.06	150	12.40	34.53	26.17	0.622
745	5.59	34.51	0.93	3.26	27.24	200	10.78	34.64	26.55	0.708
937	4.62	34.51	1.19	3.21	27.35	250	10.10	34.64	26.67	0.782
1426	3.14	34.56	1.87	3.07	27.54	300	9.60	34.64	26.76	0.852
						400	8.80	34.62	26.87	0.983
						500	7.70	34.56	26.99	1.104
						600	6.63	34.51	27.10	1.215
						700	5.88	34.51	27.20	1.316
						800	5.28	34.51	27.28	1.409
						1000	4.36	34.52	27.39	1.579

OBSERVED					COMPUTED	INTERPOLATED				COMPUTED
Z	T	S	O_2	PO_4-P	σ_t	Z	T	S	σ_t	ΔD
m	°C	‰	ml/L	µg at/L	g/L	m	°C	‰	g/L	dyn. m
HUGH M. SMITH; February 2, 1950; 0401 GCT; 08°00'N, 171°43'W; wind, 130°, force 4; weather, squally; sea, moderate; wire angle, 20°.										13
0	27.4	34.42	4.75	0.33	22.17	0	27.40	34.42	22.17	0.000
10	27.44	34.43	4.63	0.27	22.17	10	27.44	34.43	22.17	0.057
47	27.42	34.43	4.62	0.21	22.17	20	27.42	34.43	22.18	0.113
92	21.37	34.83	3.91	0.50	24.28	30	27.45	34.43	22.17	0.170
181	11.05	34.79	0.69	2.32	26.62	50	27.41	34.44	22.19	0.284
270	9.68	34.65	0.68	2.54	26.75	75	24.95	34.86	23.27	0.413
358	8.93	34.65	1.11	2.40	26.87	100	19.85	34.79	24.66	0.512
536	7.60	34.60	0.92	2.76	27.04	150	12.60	34.68	26.24	0.641
717	6.02	34.52	1.14	2.89	27.19	200	10.70	34.77	26.67	0.722
902	4.86	34.52	1.78	2.79	27.33	250	9.91	34.67	26.73	0.792
1379	3.27	34.58	1.78	2.89	27.54	300	9.38	34.65	26.80	0.860
						400	8.65	34.65	26.92	0.986
						500	7.90	34.63	27.02	1.104
						600	7.03	34.57	27.10	1.214
						700	6.20	34.53	27.18	1.317
						800	5.47	34.52	27.26	1.413
						1000	4.36	34.54	27.40	1.583
HUGH M. SMITH; February 3, 1950; 0336 GCT; 07°00'N, 172°00'W; wind, 110°, force 4; weather, partly cloudy; sea, moderate; wire angle, 35°.										14
0	27.6	34.51	4.67	0.42	22.18	0	27.60	34.51	22.18	0.000
90	25.83	34.94	3.79	0.67	23.06	10	27.65	34.51	22.16	0.057
122	20.82	34.85	4.03	0.91	24.45	20	27.63	34.51	22.17	0.113
160	14.04	34.58	2.62	1.50	25.87	30	27.62	34.52	22.18	0.170
233	10.35	34.67	0.72	2.53	26.65	50	27.55	34.53	22.21	0.283
308	9.42	34.65	1.03	2.45	26.79	75	27.10	34.66	22.45	0.422
539	7.49	34.58	1.06	2.90	27.04	100	25.18	34.94	23.26	0.548
701	6.06	34.52	0.96	3.11	27.19	150	15.60	34.61	25.56	0.727
870	5.13	34.54	1.32	2.98	27.32	200	11.42	34.70	26.48	0.829
1339	3.42	34.56	1.87	3.04	27.51	250	10.10	34.67	26.70	0.904
						300	9.52	34.66	26.79	0.973
						400	8.61	34.64	26.92	1.100
						500	7.78	34.60	27.01	1.218
						600	7.00	34.56	27.09	1.329
						700	6.07	34.53	27.19	1.431
						800	5.47	34.54	27.28	1.525
						1000	4.63	34.55	27.38	1.697
HUGH M. SMITH; February 3, 1950; 2312 GCT; 06°07'N, 171°56'W; wind, 110°, force 4; weather, cloudy; sea, slight; wire angle, 0°.										15
0	27.6	34.78	4.71	0.40	22.38	0	27.60	34.78	22.38	0.000
10	27.76	34.76	4.67	0.32	22.31	10	27.76	34.76	22.31	0.055
50	27.71	34.78	4.66	0.40	22.35	20	27.75	34.76	22.32	0.110
100	26.41	34.90	3.88	0.50	22.85	30	27.74	34.77	22.33	0.166
199	13.68	34.56	2.17	1.72	25.93	50	27.71	34.78	22.35	0.276
296	9.85	34.65	1.00	2.58	26.72	75	27.68	34.78	22.35	0.414
393	8.90	34.65	1.02	2.40	26.88	100	26.41	34.90	22.85	0.546
588	7.04	34.54	0.88	2.80	27.07	150	19.70	34.83	24.73	0.755
783	5.48	34.54	1.27	2.77	27.28	200	13.60	34.57	25.96	0.889
979	4.46	34.54	1.54	2.90	27.39	250	10.97	34.68	26.55	0.981
1470	3.16	34.60	2.02	2.88	27.57	300	9.80	34.66	26.74	1.054
						400	8.82	34.64	26.89	1.186
						500	8.00	34.60	26.98	1.307
						600	6.95	34.54	27.08	1.419
						700	6.11	34.53	27.19	1.523
						800	5.35	34.54	27.29	1.616
						1000	4.38	34.54	27.40	1.783

POFI

HMS-2

OBSERVED					COMPUTED	INTERPOLATED				COMPUTED
Z	T	S	O_2	PO_4-P	σ_t	Z	T	S	σ_t	ΔD
m	°C	‰	ml/L	µg at/L	g/L	m	°C	‰	g/L	dyn. m
16	HUGH M. SMITH; February 4, 1950; 0923, 1048 GCT; 05°02'N, 172°01'W; wind, 090°, force 4; weather, partly cloudy; sea, moderate; wire angle, 10°, 10°.									
0	27.4	34.96	4.78	0.48	22.58	0	27.40	34.96	22.58	0.000
10	27.39	34.94	4.73	0.38	22.57	10	27.39	34.94	22.57	0.053
49	27.11	35.05	4.69	0.50	22.74	20	27.38	34.94	22.57	0.106
98	25.90	35.12	3.87	0.66	23.17	30	27.37	34.94	22.58	0.159
197	15.79	34.63	2.81	1.40	25.53	50	27.11	35.05	22.74	0.263
293	9.78	34.67	0.96	2.50	26.75	75	26.90	35.08	22.83	0.391
388	8.79	34.63	0.92	2.60	26.88	100	25.80	35.12	23.21	0.513
580	7.20	34.54	0.83	2.91	27.05	150	21.20	34.92	24.40	0.721
						200	15.45	34.61	25.59	0.872
772	5.32	34.52	1.35	3.12	27.28	250	10.99	34.65	26.52	0.973
967	4.43	34.52	1.82	3.14	27.38	300	9.70	34.67	26.76	1.046
1456	3.12	34.58	2.14	3.22	27.56	400	8.68	34.62	26.89	1.176
						500	7.88	34.58	26.98	1.297
						600	7.00	34.54	27.08	1.410
						700	6.00	34.52	27.19	1.513
						800	5.15	34.52	27.30	1.606
						1000	4.30	34.53	27.40	1.771
17	HUGH M. SMITH; February 4, 1950; 1916 GCT; 03°58'N, 172°00'W; wind, 100°, force 4; weather, partly cloudy; sea, moderate; wire angle, 5°.									
0	27.2	35.14	4.67	0.57	22.78	0	27.20	35.14	22.78	0.000
10	27.19	35.10	4.59	0.38	22.75	10	27.19	35.16	22.80	0.051
48	27.20	35.14	4.63	0.47	22.78	20	27.20	35.14	22.78	0.102
96	27.10	35.16	4.66	0.42	22.83	30	27.20	35.14	22.78	0.153
193	13.84	34.60	2.24	1.70	25.93	50	27.20	35.14	22.78	0.255
290	9.26	34.67	1.85	2.38	26.84	75	27.13	35.15	22.81	0.382
386	8.44	34.63	1.86	2.43	26.93	100	27.10	35.16	22.83	0.509
580	4.04	34.60	1.17	2.88	27.12	150	23.70	35.07	23.80	0.740
774	5.52	34.54	1.59	2.93	27.27	200	12.68	34.63	26.19	0.891
968	4.54	34.56	1.87	2.93	27.40	250	10.14	34.70	26.71	0.973
1459	3.08	34.58	2.16	2.91	27.56	300	9.15	34.66	26.85	1.040
						400	8.33	34.62	26.95	1.163
						500	7.70	34.61	27.03	1.279
						600	6.90	34.59	27.13	1.387
						700	6.03	34.56	27.22	1.486
						800	5.38	34.54	27.29	1.578
						1000	4.40	34.57	27.42	1.744
18	HUGH M. SMITH; February 5, 1950; 0426 GCT; 02°56'N, 172°04'W; wind, 100°, force 5; weather, partly cloudy; sea, moderate; wire angle, 40°.									
0	26.8	35.16	4.85	0.72	22.92	0	26.80	35.16	22.92	0.000
7	26.90	35.16	4.70	0.54	22.89	10	26.90	35.16	22.89	0.050
38	26.82	35.12	4.71	0.56	22.89	20	26.86	35.15	22.90	0.099
77	26.80	35.17	4.59	0.49	22.93	30	26.84	35.13	22.89	0.149
153	25.92	35.23	4.29	0.70	23.25	50	26.81	35.15	22.91	0.249
228	11.93	34.67	2.48	1.87	26.37	75	26.80	35.17	22.93	0.373
304	10.07	34.74	1.67	2.23	26.76	100	26.40	35.20	23.08	0.496
461	8.62	34.67	1.81	2.50	26.94	150	25.95	35.23	23.24	0.735
624	6.64	34.60	1.22	3.00	27.18	200	13.70	34.61	25.97	0.905
794	5.47	34.54	1.67	2.96	27.28	250	11.08	34.76	26.59	0.995
1241	3.67	34.56	2.11	2.98	27.49	300	10.13	34.74	26.75	1.067
						400	9.37	34.71	26.85	1.200
						500	8.00	34.66	27.03	1.321
						600	6.90	34.62	27.15	1.428
						700	6.04	34.56	27.22	1.526
						800	5.40	34.52	27.27	1.619
						1000	4.34	34.52	27.39	1.790

OBSERVED					COMPUTED	INTERPOLATED				COMPUTED
Z	T	S	O_2	PO_4-P	σ_t	Z	T	S	σ_t	ΔD
m	°C	‰	ml/L	µg at/L	g/L	m	°C	‰	g/L	dyn. m

19

HUGH M. SMITH; February 5, 1950; 1240 GCT; 02°00'N, 172°05'W; wind, 110°, force 5; weather, cloudy; sea, missing; wire angle, 55°.

0	26.2	35.16	4.70	0.57	23.11	0	26.20	35.16	23.11	0.000
61	25.30	35.23	4.58	0.60	23.44	10	26.20	35.16	23.11	0.048
81	25.18	35.26	4.53	0.67	23.50	20	26.21	35.16	23.11	0.095
105	25.20	35.23	4.46	0.66	23.47	30	26.20	35.16	23.11	0.143
155	25.07	35.28	4.40	0.74	23.55	50	25.64	35.20	23.32	0.237
206	11.92	34.70	2.85	1.50	26.39	75	25.20	35.26	23.50	0.350
258	11.19	34.83	2.49	1.64	26.63	100	25.20	35.26	23.50	0.460
366p	9.98r	34.88r	1.62	2.12	-	150	25.10	35.27	23.54	0.682
479	8.78	34.63	1.45	2.33	26.88	200	12.80	34.64	26.17	0.840
606	7.10	34.56	1.55	2.62	27.08	250	11.28	34.82	26.60	0.925
984	4.44	34.52	2.00	2.81	27.38	300	10.80	34.82	26.69	0.999
						400	9.79	34.74	26.80	1.137
						500	8.50	34.63	26.93	1.265
						600	7.17	34.57	27.08	1.381
						700	6.28	34.54	27.17	1.485
						800	5.53	34.53	27.26	1.581
						1000	(4.38)	(34.52)	(27.39)	(1.753)

20

HUGH M. SMITH; February 6, 1950; 0135, 0243 GCT; 01°01'N, 172°09'W; wind, 140°, force 4; weather, partly cloudy; sea, slight; wire angle, 60°, 10°. a)

0	25.0	35.23	4.78	0.80	23.53	0	25.00	35.23	23.54	0.000
56	24.75	35.21	4.64	0.72	23.59	10	24.90	35.23	23.57	0.043
73	24.72	35.19	-	0.80	23.59	20	24.82	35.22	23.58	0.087
93	24.72	35.21	4.55	0.72	23.60	30	24.78	35.21	23.59	0.130
125	24.72	35.17	4.78	0.78	23.57	50	24.75	35.20	23.59	0.217
155	24.44	35.19	4.44	0.82	23.67	75	24.72	35.19	23.59	0.325
185	17.40	34.76	3.19	1.06	25.25	100	24.72	35.20	23.60	0.434
						150	24.60	35.18	23.62	0.651
1065	4.22	34.52	2.10	2.94	27.40	200	15.85	34.68	25.55	0.822
1262	3.62	34.56	2.16	2.83	27.50	250b)	12.10	34.70	26.36	0.928
1657	2.76	34.58	2.45	2.88	27.59	300	11.26	34.80	26.59	1.009
						400	10.18	34.75	26.75	1.155
						500	8.62	34.64	26.92	1.287
						600	7.22	34.56	27.06	1.404
						700	6.30	34.53	27.16	1.510
						800	5.55	34.51	27.24	1.607
						1000	4.37	34.51	27.38	1.781

21

HUGH M. SMITH; February 6, 1950; 1307 GCT; 00°00', 171°59'W; wind, 100°, force 4; weather, partly cloudy; sea, slight; wire angle, 5°. a)

0	24.9	35.32	4.79	0.82	23.63	0	24.90	35.32	23.63	0.000
10	25.04	35.34	4.66	0.72	23.60	10	25.04	35.34	23.61	0.043
48	24.92	35.34	4.58	0.75	23.64	20	25.02	35.34	23.61	0.086
96	24.84	35.34	4.51	0.74	23.67	30	24.99	35.34	23.62	0.129
192	18.78	35.39	3.16	1.08	25.39	50	24.92	35.34	23.64	0.214
288	11.91	34.87	2.83	1.73	26.52	75	24.89	35.34	23.65	0.321
384	10.79	34.78	2.13	1.90	26.66	100	24.83	35.34	23.67	0.428
576	7.50	34.58	1.53	2.51	27.04	150	24.42	35.35	23.80	0.639
771	5.73	34.52	1.92	2.57	27.23	200	17.40	35.36	25.71	0.803
967	4.60	34.52	2.22	2.61	27.36	250	12.80	34.96	26.42	0.903
1652	2.83	34.60	2.47	2.72	27.60	300	11.70	34.86	26.56	0.985
						400	10.59	34.77	26.69	1.135
						500	8.78	34.65	26.90	1.271
						600	7.20	34.57	27.07	1.388
						700	6.30	34.53	27.16	1.493
						800	5.55	34.52	27.25	1.590
						1000	4.50	34.52	27.37	1.765

a) Vessel under power "upstream" to reduce wire angle.
b) All values from 250 to 800 meters interpolated from values of stations 19 and 21.

POFI

HMS-2

OBSERVED					COMPUTED	INTERPOLATED				COMPUTED
Z	T	S	O_2	PO_4-P	σ_t	Z	T	S	σ_t	ΔD
m	°C	‰	ml/L	µg at/L	g/L	m	°C	‰	g/L	dyn. m
22	HUGH M. SMITH; February 6, 1950; 2249 GCT; 01°01'S, 172°00'W; wind, 080°, force 5; weather, cloudy; sea, moderate; wire angle, 26°.[a]									
0	26.0	35.52	4.82	–	23.44	0	26.00	35.52	23.45	0.000
98	24.94	35.37	4.39	0.68	23.66	10	26.00	35.52	23.45	0.044
133	24.77	35.48	4.25	–	23.79	20	25.97	35.52	23.46	0.089
177	23.40	35.84	3.52	0.89	24.47	30	25.92	35.51	23.46	0.133
265	11.90	34.90	2.88	1.60	26.55	50	25.78	35.48	23.48	0.222
354	10.76	34.79	1.85	1.95	26.68	75	25.45	35.41	23.53	0.333
443	10.18	34.74	1.67	2.07	26.74	100	24.90	35.38	23.68	0.441
623	6.91	34.58	–	–	27.12	150	24.72	35.52	23.84	0.651
989	4.29	34.56	2.12	2.70	27.45	200	19.23	35.53	25.39	0.821
1466	3.08	34.56	2.33	2.70	27.55	250	13.00	35.00	26.41	0.930
						300	11.08	34.82	26.64	1.009
						400	10.50	34.77	26.71	1.155
						500	9.40	34.68	26.82	1.293
						600	7.30	34.59	27.07	1.415
						700	6.00	34.56	27.23	1.517
						800	5.20	34.55	27.32	1.607
						1000	4.20	34.56	27.44	1.768
23	HUGH M. SMITH; February 7, 1950; 0825 GCT; 02°00'S, 172°02'W; wind, 080°, force 4; weather, partly cloudy; sea, slight; wire angle, 6°.[a]									
0	27.2	35.68	4.67	0.70	23.19	0	27.20	35.68	23.19	0.000
10	27.24	35.66	4.63	0.63	23.16	10	27.24	35.66	23.16	0.047
49	26.84	35.62	4.53	0.67	23.26	20	27.20	35.66	23.17	0.094
98	25.93	35.52	4.56	0.74	23.47	30	27.12	35.65	23.19	0.141
196	23.32	35.59	3.85	1.07	24.31	50	26.84	35.62	23.26	0.235
293	10.81	34.81	2.00	2.32	26.68	75	26.30	35.57	23.39	0.350
391	9.99	34.72	1.59	2.45	26.75	100	25.88	35.50	23.47	0.462
586	7.86	34.61	2.08	2.67	27.01	150	24.65	35.32	23.71	0.680
781	5.39	34.52	2.17	2.87	27.27	200	21.50	35.70	24.91	0.865
975	4.37	34.52	2.25	2.98	27.39	250	12.02	34.93	26.55	0.982
1468	–	34.67	1.90	2.46	–	300	10.71	34.80	26.69	1.057
						400	9.90	34.71	26.76	1.197
						500	8.90	34.65	26.88	1.330
						600	7.70	34.61	27.03	1.450
						700	6.33	34.55	27.18	1.557
						800	5.24	34.52	27.29	1.652
						1000	(4.30)	34.52	(27.39)	(1.819)
24	HUGH M. SMITH; February 7, 1950; 1812 GCT; 03°00'S, 172°04'W; wind, 080°, force 4; weather, cloudy; sea, slight; wire angle, 51°.									
0	26.7	35.62	4.72	0.72	23.30	0	26.70	35.62	23.30	0.000
71	26.47	35.57	4.73	0.66	23.33	10	26.70	35.62	23.30	0.046
153	25.25	35.39	4.58	–	23.57	20	26.69	35.62	23.30	0.092
182	24.08	35.21	3.84	0.91	23.79	30	26.68	35.61	23.30	0.138
241	15.63u	35.62u	2.31	1.67	26.33	50	26.61	35.60	23.31	0.230
306	10.55	34.79	2.57	1.94	26.71	75	26.42	35.56	23.34	0.344
372	9.52	34.72	2.53	2.04	26.83	100	26.08	35.51	23.41	0.458
511	8.38	34.69	2.01	2.43	26.99	150	25.30	35.40	23.57	0.681
661	6.72	34.58	1.77	2.48	27.15	200	23.15	35.26	24.11	0.888
818	5.54	34.51	2.04	2.89	27.24	250	14.60	35.16	26.20	1.032
1257	3.62	34.56	2.46	2.86	27.50	300	10.75	34.81	26.69	1.116
						400	9.27	34.70	26.86	1.251
						500	8.44	34.70	26.99	1.373
						600	7.50	34.64	27.09	1.486
						700	6.30	34.55	27.18	1.590
						800	5.62	34.52	27.24	1.687
						1000	4.60	34.50	27.35	1.865

a) Vessel under power "upstream" to reduce wire angle.

OBSERVED					COMPUTED	INTERPOLATED				COMPUTED
Z	T	S	O_2	PO_4-P	σ_t	Z	T	S	σ_t	ΔD
m	°C	‰	ml/L	µg at/L	g/L	m	°C	‰	g/L	dyn. m
HUGH M. SMITH; February 8, 1950; 0302 GCT; 04°00'S, 171°58'W; wind, 060°, force 5; weather, partly cloudy; sea, moderate; wire angle, 25°.										25
0	27.7	35.70	4.58	0.62	23.04	0	27.70	35.70	23.04	0.000
9	27.94	35.71	4.58	0.52	22.97	10	27.94	35.71	22.97	0.049
43	27.72	35.68	4.55	0.60	23.02	20	27.92	35.71	22.98	0.098
86	27.30	35.68	4.32	0.68	23.16	30	27.88	35.70	22.98	0.147
172	24.90	36.09	3.60	0.89	24.22	50	27.63	35.68	23.05	0.244
258	13.17	35.01	2.23	1.98	26.39	75	27.38	35.68	23.13	0.365
344	10.44	34.78	2.20	2.18	26.72	100	27.20	35.69	23.19	0.484
518	7.94	34.58	1.32	2.83	26.98	150	26.45	35.83	23.54	0.712
693	6.24	34.56	1.97	2.77	27.20	200	22.10	35.92	24.91	0.901
871	4.89	34.54	2.52	2.88	27.35	250	14.50	35.15	26.21	1.027
1332	3.51	34.58	2.63	2.98	27.52	300	11.58	34.88	26.59	1.112
						400	9.42	34.69	26.83	1.254
						500	8.12	34.58	26.95	1.380
						600	7.06	34.56	27.08	1.494
						700	6.18	34.56	27.20	1.597
						800	5.38	34.55	27.30	1.689
						1000	4.25	34.55	27.42	1.854
HUGH M. SMITH; February 8, 1950; 1238 GCT; 05°02'S, 171°53'W; wind, 060°, force 5; weather, partly cloudy; sea, rough; wire angle, 40°.										26
0	27.6	35.79	4.64	0.57	23.14	0	27.60	35.79	23.14	0.000
8	27.84	35.77	4.55	0.49	23.04	10	27.84	35.77	23.05	0.048
38	27.84	35.68	4.58	0.54	22.98	20	27.84	35.72	23.01	0.096
73	27.62	35.71	4.42	0.62	23.07	30	27.84	35.70	22.99	0.145
138	26.87	35.81	3.89	0.80	23.39	50	27.80	35.69	23.00	0.243
198	23.52	36.08	3.49	0.91	24.62	75	27.58	35.71	23.09	0.365
256	15.48	35.25	2.41	1.68	26.07	100	27.08	35.78	23.30	0.483
383	9.72	34.72	2.27	2.23	26.80	150	26.56	35.84	23.51	0.710
516	8.16	34.65	2.41	2.13	26.99	200	23.30	36.05	24.66	0.905
662	6.70	34.61	1.67	2.74	27.17	250	16.10	35.30	25.97	1.042
1085	4.22	34.54	2.38	2.90	27.42	300	11.37	34.86	26.62	1.133
						400	9.49	34.70	26.82	1.274
						500	8.35	34.66	26.97	1.398
						600	7.30	34.63	27.11	1.511
						700	6.40	34.59	27.20	1.613
						800	5.63	34.56	27.27	1.707
						1000	4.45	34.54	27.39	1.878
HUGH M. SMITH; February 18, 1950; 1602 GCT; 04°55'S, 158°13'W; wind, 070°, force 4; weather, partly cloudy; sea, slight; wire angle, 32°.										30 a)
0	26.6	35.75	4.77	0.72	23.43	0	26.60	35.75	23.43	0.000
8	26.62	35.73	4.70	0.60	23.41	10	26.62	35.73	23.41	0.045
40	26.62	35.70	4.69	0.59	23.38	20	26.62	35.72	23.40	0.090
80	25.78	35.43	4.81	0.66	23.45	30	26.62	35.70	23.39	0.135
159	23.88	35.93	3.81	0.88	24.40	50	26.62	35.70	23.39	0.225
238	12.98	34.96	2.00	1.92	26.39	75	26.30	35.59	23.41	0.338
316	10.09	34.78	1.98	2.07	26.79	100	25.60	35.36	23.45	0.451
473	8.21	34.63	2.06	2.42	26.97	150	24.70	35.66	23.95	0.663
630	6.92	34.61	2.08	2.63	27.14	200	20.55	35.83	25.27	0.834
790	5.62	34.54	1.98	2.77	27.26	250	12.20	34.91	26.50	0.944
1207	3.72	34.54	2.51	2.70	27.47	300	10.40	34.80	26.75	1.018
						400	8.97	34.69	26.90	1.149
						500	7.99	34.63	27.01	1.268
						600	7.18	34.62	27.12	1.378
						700	6.38	34.58	27.19	1.480
						800	5.55	34.54	27.27	1.575
						1000	4.48	34.54	27.39	1.746
HUGH M. SMITH; February 19, 1950; 0223 GCT; 03°53'S, 157°47'W; wind, 070°, force 4; weather, partly cloudy; sea, slight; wire angle, 42°.										31
0	25.9	35.52	4.85	0.76	23.48					

a) Stations 27, 28, and 29 not hydrographic stations.

POFI

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OBSERVED					COMPUTED	INTERPOLATED				COMPUTED
Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg at/L	σ_t g/L	Z m	T °C	S ‰	σ_t g/L	ΔD dyn. m
32	HUGH M. SMITH; February 19, 1950; 1223 GCT; 03°06'S, 158°21'W; wind, 070°, force 5; weather, partly cloudy; sea, slight; wire angle, 56°.									
0	25.7	35.48	4.82	0.77	23.51	0	25.70	35.48	23.51	0.000
6	25.65	35.48	4.75	0.61	23.52	10	25.64	35.48	23.53	0.044
30	25.63	-	-	-	-	20	25.63	35.47	23.52	0.088
57	25.63	35.46	4.75	0.72	23.51	30	25.63	35.47	23.52	0.131
101	25.45	35.39	4.75	0.67	23.52	50	25.63	35.46	23.52	0.219
137	24.84	35.46	4.51	0.92	23.76	75	25.61	35.44	23.51	0.330
180	11.24r	35.30	2.45	1.43	26.98	100	25.46	35.39	23.52	0.440
268	11.08	34.85	2.09	2.02	26.66	150	24.50	35.60	23.97	0.651
362	9.26	-	1.87	2.28	-	200	15.23	35.19	26.09	0.801
573	6.99	34.58	1.34	2.83	27.11	250	11.90	34.90	26.55	0.890
886	4.68	34.54	2.19	2.82	27.37	300	10.38	34.80	26.75	0.963
						400	8.69	34.66	26.92	1.092
						500	7.60	34.60	27.04	1.209
						600	6.82	34.58	27.13	1.316
						700	6.09	34.56	27.21	1.416
						800	5.34	34.55	27.30	1.508
						1000	(4.27)	(34.54)	(27.41)	(1.673)
33	HUGH M. SMITH; February 19, 1950; 2260 GCT; 02°03'S, 158°28'W; wind, 080°, force 5; weather, partly cloudy; sea, moderate; wire angle, 10°. a)									
0	25.2	35.37	4.75	0.80	23.58	0	25.20	35.37	23.58	0.000
10	25.14	35.37	4.74	0.68	23.60	10	25.14	35.37	23.60	0.043
50	24.68	35.37	-	-	23.74	20	25.10	35.37	23.61	0.086
98	24.36	35.23	4.78	0.78	23.73	30	25.03	35.37	23.63	0.129
190	15.43	35.21	2.04	1.67	26.05	50	24.68	35.37	23.74	0.214
280	10.94	34.81	2.45	1.96	26.66	75	24.35	35.24	23.74	0.319
371	9.41	34.70	1.93	2.32	26.84	100	24.37	35.43	23.88	0.422
553	9.14	34.67	1.72	2.35	26.86	150	24.00	35.71	24.20	0.619
519	8.18	34.61	1.46	2.64	26.96	200	14.54	35.12	26.18	0.761
786	5.49	34.52	2.16	2.78	27.26	250	11.75	34.87	26.55	0.847
1352	3.36	34.58	2.57	2.72	27.54	300	10.49	34.78	26.71	0.921
						400	9.08	34.67	26.87	1.055
						500	8.33	34.62	26.95	1.179
						600	7.39	34.57	27.05	1.295
						700	6.39	34.53	27.15	1.403
						800	5.41	34.52	27.27	1.499
						1000	4.34	34.54	27.41	1.668
34	HUGH M. SMITH; February 20, 1950; 0815 GCT; 01°07'S, 158°28'W; wind, 080°, force 4; weather, partly cloudy; sea, moderate; wire angle, 47°.									
0	24.4	35.41	4.69	1.02	23.85	0	24.40	35.41	23.85	0.000
6	24.42	35.35	4.64	0.68	23.80	10	24.42	35.35	23.80	0.041
30	24.41	35.35	4.67	0.70	23.80	20	24.41	35.35	23.80	0.082
61	24.36	35.37	4.61	0.67	23.83	30	24.41	35.35	23.80	0.123
123	23.57	35.79	4.05	0.75	24.38	50	24.38	35.36	23.82	0.205
184	15.42	35.26	2.72	0.35	26.10	75	24.32	35.38	23.85	0.308
247	11.69	34.87	2.71	1.70	26.56	100	24.28	35.44	23.91	0.410
381	9.94	34.76	2.34	2.13	26.79	150	20.00	35.61	25.25	0.580
526	7.54	34.61	1.75	2.55	27.05	200	14.18	35.10	26.24	0.696
848	5.02	34.52	2.09	2.88	27.32	250	11.65	34.87	26.57	0.780
1295	3.45	34.58	2.10	2.85	27.53	300	10.77	34.81	26.69	0.854
						400	9.68	34.74	26.82	0.992
						500	7.92	34.63	27.02	1.115
						600	6.79	34.56	27.12	1.224
						700	5.98	34.54	27.21	1.324
						800	5.31	34.52	27.28	1.417
						1000	4.30	34.54	27.41	1.584

a) Vessel under power "upstream" to reduce wire angle.

OBSERVED					COMPUTED	INTERPOLATED				COMPUTED
Z	T	S	O_2	PO_4-P	σ_t	Z	T	S	σ_t	ΔD
m	°C	‰	ml/L	µg at/L	g/L	m	°C	‰	g/L	dyn. m

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HUGH M. SMITH; February 20, 1950; 1924 GCT; 00°04'S, 158°22'W; wind, 080°, force 5; weather, partly cloudy; sea, moderate; wire angle, 18°.[a]

0	23.8	35.10	4.75	0.87	23.80	0	23.80	35.10	23.80	0.000
9	23.84	35.07	4.73	0.70	23.76	10	23.84	35.07	23.76	0.041
46	23.76	35.10	4.66	–	23.81	20	23.83	35.08	23.77	0.083
93	23.46	35.10	4.48	0.75	23.90	30	23.80	35.09	23.79	0.124
185	14.99	35.17	3.30	1.23	26.12	50	23.72	35.10	23.82	0.207
276	11.33	34.85	2.04	2.02	26.62	75	23.59	35.10	23.86	0.309
368	10.02	34.76	1.67	2.20	26.78	100	23.36	35.10	23.93	0.410
553	7.06	34.56	1.71	2.79	27.09	150	21.30	35.39	24.73	0.593
738	5.66	34.54	2.08	2.74	27.25	200	13.50	35.02	26.33	0.719
1112	3.96	34.56	2.24	2.82	27.46	250	11.85	34.89	26.55	0.802
1589	2.91	34.60	2.37	2.84	27.59	300	11.08	34.83	26.65	0.878
						400	9.51	34.73	26.84	1.016
						500	7.82	34.61	27.01	1.138
						600	6.56	34.55	27.15	1.246
						700	5.89	34.54	27.22	1.344
						800	5.33	34.54	27.29	1.436
						1000	4.40	34.55	27.41	1.602

36

HUGH M. SMITH; February 21, 1950; 0845 GCT; 01°02'N, 158°05'W; wind, 080°, force 4; weather, partly cloudy; sea, slight; wire angle, 36°.[a]

0	24.7	35.05b)	4.83	0.73	23.49	0	24.7
7	24.70	35.05	4.83	0.66	23.49	10	24.69
34	24.50	34.83	4.79	0.70	23.38	20	24.62
67	24.22	34.85	4.76	0.70	23.48	30	24.55
135	21.44	34.99	3.80	1.04	24.38	50	24.39
210	12.12	35.07	2.81	1.74	26.64	75	24.12
286	11.46	35.07	2.10	2.00	26.76	100	23.75
441	8.99	34.70	1.25	2.54	26.90	150	19.15
600	6.76	34.58	1.54	2.79	27.14	200	12.48
761	5.72	34.56	1.94	2.75	27.26	250	11.73
1184	3.69	34.60	2.08	2.87	27.52	300	11.23
						400	9.66
						500	8.11
						600	6.76
						700	6.02
						800	5.50
						1000	4.51

37

HUGH M. SMITH; February 21, 1950; 2330 GCT; 02°03'N, 158°08'W; wind, 120°, force 5; weather, cloudy; sea, moderate; wire angle, 65°.

0	24.7	35.05	4.87	0.75	23.49	0	24.70	35.05	23.49	0.000
10	24.68	35.01	4.74	0.67	23.47	10	24.68	35.01	23.47	0.044
48	24.59	34.92	4.70	0.66	23.43	20	24.62	34.95	23.44	0.089
86	24.36	35.01	4.70	0.70	23.56	30	24.60	34.94	23.44	0.133
138	23.68	35.01	4.16	0.85	23.76	50	24.59	34.92	23.43	0.223
196	11.43	34.76	2.64	1.75	26.53	75	24.45	34.98	23.51	0.334
253	10.86	34.79	2.04	2.00	26.66	100	24.00	35.01	23.67	0.443
364p	11.40	34.74	2.48	–	26.52	150	23.30	35.00	23.87	0.652
475	8.30	34.69	1.33	2.53	27.00	200	11.29	34.78	26.57	0.793
744	5.62	34.58	1.58	2.80	27.29	250	10.89	34.79	26.65	0.867
1617	2.88	34.60	2.24	2.83	27.60	300	10.31	34.77	26.74	0.938
						400	9.16	34.72	26.89	1.070
						500	8.03	34.68	27.04	1.188
						600	6.92	34.63	27.16	1.294
						700	5.98	34.60	27.26	1.390
						800	5.23	34.58	27.34	1.478
						1000	4.25	34.58	27.45	1.636

a) Vessel under power "upstream" to reduce wire angle.
b) Depths of salinities uncertain owing to failure to record bottle numbers.

POFI

HMS-2

OBSERVED					COMPUTED	INTERPOLATED				COMPUTED
Z	T	S	O_2	PO_4-P	σ_t	Z	T	S	σ_t	ΔD
m	°C	‰	ml/L	µg at/L	g/L	m	°C	‰	g/L	dyn. m
38	HUGH M. SMITH; February 23, 1950; 0410 GCT; 03°02'N, 157°51'W; wind, 090°, force 4; weather, partly cloudy; sea, moderate; wire angle, 62°.									
0	25.0	35.05	4.96	0.78	23.40	0	25.00	35.05	23.40	0.000
10	25.00	35.07	4.86	0.76	23.41	10	25.00	35.07	23.42	0.045
88	24.58	34.97	4.83	0.73	23.47	20	25.00	35.07	23.42	0.090
170	16.83	34.78	2.64	1.42	25.40	30	24.87	35.04	23.43	0.134
348	9.41	34.72	1.89	2.42	26.85	50	24.71	35.00	23.45	0.224
541	7.16	34.74	1.78	2.38	27.21	75	24.61	34.98	23.47	0.335
965	4.34	34.58	2.01	2.82	27.44	100	24.52	34.98	23.49	0.447
1286	3.46	34.58	2.07	2.97	27.53	150	23.40	35.01	23.85	0.661
1677	2.62	34.61	2.25	2.98	27.63	200	11.05	34.71	26.56	0.802
						250	9.93	34.72	26.76	0.874
						300	9.52	34.72	26.83	0.940
						400	9.00	34.72	26.92	1.065
						500	7.61	34.74	27.15	1.177
						600	6.66	34.70	27.25	1.274
						700	5.92	34.59	27.26	1.365
						800	5.32	34.58	27.33	1.454
						1000	4.21	34.58	27.45	1.612
39	HUGH M. SMITH; February 23, 1950; 1335, 1430 GCT; 04°03'N, 157°53'W; wind, 100°, force 6; weather, partly cloudy; sea, moderate; wire angle, 30°, 31°.									
0	25.6	35.16	4.81	0.63	23.30	0	25.60	35.16	23.30	0.000
9	25.58	35.12	4.75	0.54	23.27	10	25.58	35.12	23.28	0.046
43	25.60	35.07	4.70	-	23.23	20	25.58	35.10	23.26	0.092
84	25.34	35.10	4.55	0.62	23.33	30	25.59	35.08	23.24	0.139
167	20.95	34.96	3.36	1.03	24.50	50	25.60	35.07	23.23	0.232
250	9.88	34.63	1.92	2.11	26.70	75	25.59	35.08	23.24	0.349
334	9.03	34.67	2.05	2.18	26.87	100	24.84	35.09	23.48	0.463
504	7.80	34.63	0.83	2.88	27.03	150	23.01	35.03	23.97	0.674
677	6.24	34.56	1.28	2.89	27.20	200	12.50	34.66	26.25	0.820
						250	9.88	34.63	26.70	0.901
1048	4.24	34.58	1.43	3.10	27.47	300	9.34	34.65	26.81	0.969
1538	2.73	34.61	2.22	3.02	27.62	400	8.56	34.66	26.94	1.094
						500	7.83	34.63	27.03	1.210
						600	6.98	34.59	27.12	1.319
						700	6.07	34.56	27.22	1.419
						800	5.41	34.56	27.30	1.511
						1000	4.41	34.58	27.43	1.675
40	HUGH M. SMITH; February 23, 1950; 2315 GCT; 05°00'N, 157°59'W; wind, 080°, force 5; weather, partly cloudy; sea, moderate; wire angle, 27°.									
0	26.4	35.12	4.73	0.57	23.02	0	26.40	35.12	23.02	0.000
8	26.34	35.12	4.70	0.54	23.04	10	26.33	35.12	23.04	0.048
42	26.18	35.12	4.71	0.55	23.09	20	26.29	35.12	23.05	0.097
84	26.00	35.10	4.71	0.57	23.13	30	26.23	35.12	23.07	0.145
170	18.64	34.79	2.89	1.34	24.97	50	26.14	35.12	23.10	0.241
260	9.72	34.67	1.44	2.51	26.76	75	26.04	35.11	23.13	0.361
353	-	34.61	1.78	2.48	-	100	25.90	35.10	23.16	0.480
541	7.42	34.58	1.25	-	27.05	150	23.78	35.04	23.76	0.704
731	5.68	34.56	-	3.32	27.27	200	14.00	34.63	25.92	0.863
924	4.65	34.54	1.28	3.28	27.37	250	9.92	34.67	26.73	0.952
1408	3.20	34.60	1.92	3.20	27.57	300	9.30	34.65	26.82	1.019
						400	8.56	34.62	26.91	1.145
						500	7.79	34.59	27.00	1.264
						600	6.87	34.58	27.13	1.373
						700	5.93	34.56	27.24	1.472
						800	5.28	34.55	27.31	1.562
						1000	4.38	34.54	27.40	1.728

OBSERVED					COMPUTED	INTERPOLATED				COMPUTED
Z	T	S	O_2	PO_4-P	σ_t	Z	T	S	σ_t	ΔD
m	°C	‰	ml/L	µg at/L	g/L	m	°C	‰	g/L	dyn. m
HUGH M. SMITH; February 24, 1950; 0812 GCT; 06°00'N, 158°03'W; wind, 100°, force 5; weather, partly cloudy; sea, moderate; wire angle, 16°.										41
0	26.8	34.92	4.71	0.50	22.74	0	26.80	34.92	22.74	0.000
9	26.84	34.90	4.71	0.38	22.72	10	26.84	34.90	22.71	0.051
48	26.84	34.92	4.71	0.45	22.73	20	26.84	34.91	22.72	0.103
95	26.51	34.97	4.57	0.46	22.87	30	26.84	34.92	22.73	0.154
190	13.09	34.67	1.32	2.16	26.14	50	26.84	34.92	22.73	0.257
286	9.72	34.69	1.35	2.48	26.78	75	26.82	34.93	22.74	0.386
381p	11.98	34.67	1.43	2.51	26.36	100	26.22	35.00	22.99	0.512
572	7.33	34.58	0.56	3.07	27.06	150	20.72	34.88	24.50	0.723
763	5.61	34.54	1.04	3.08	27.26	200	12.50	34.67	26.26	0.856
955	4.68	34.58	1.26	3.14	27.40	250	10.41	34.72	26.68	0.937
1441	3.13	34.61	0.96	3.01	27.58	300	9.59	34.68	26.79	1.006
						400	8.70	34.64	26.90	1.134
						500	7.91	34.61	27.00	1.253
						600	7.09	34.57	27.09	1.365
						700	6.13	34.54	27.19	1.467
						800	5.38	34.55	27.30	1.561
						1000	4.53	34.58	27.42	1.726
HUGH M. SMITH; February 24, 1950; 1748 GCT; 07°00'N, 157°58'W; wind, 090°, force 4; weather, cloudy; sea, slight; wire angle, 10°.										42
0	26.7	34.43	4.78	0.36	22.41	0	26.70	34.43	22.41	0.000
10	26.71	34.42	4.67	0.32	22.40	10	26.71	34.42	22.40	0.054
48	26.83	34.76	4.67	0.38	22.61	20	26.71	34.42	22.40	0.109
97	24.85	35.07	4.00	0.60	23.46	30	26.71	34.42	22.40	0.164
194	11.38	34.69	0.67	2.58	26.48	50	26.83	34.76	22.61	0.271
290	9.68	34.69	0.70	2.73	26.78	75	26.02	34.99	23.04	0.398
387p	11.12	34.63	0.92	2.68	26.48	100	24.60	35.06	23.53	0.514
580	6.96	34.58	0.83	3.07	27.12	150	14.30	34.63	25.86	0.679
774	5.68	34.56	1.08	3.17	27.26	200	11.22	34.71	26.53	0.772
967	4.67	34.56	1.04	3.27	27.39	250	10.28	34.71	26.70	0.847
1454	3.21	34.61	1.77	2.09	27.58	300	9.58	34.69	26.80	0.915
						400	8.57	34.64	26.92	1.041
						500	7.66	34.61	27.04	1.158
						600	6.79	34.57	27.13	1.265
						700	6.12	34.56	27.21	1.365
						800	5.52	34.56	27.29	1.458
						1000	4.53	34.56	27.40	1.627
HUGH M. SMITH; February 25, 1950; 0234 GCT; 08°02'N, 157°49'W; wind, 090°, force 5; weather, cloudy; sea, slight; wire angle, 0°.										43
0	26.8	34.38	4.80	0.36	22.34	0	26.80	34.38	22.34	0.000
10	26.78	34.36	4.75	0.28	22.33	10	26.78	34.36	22.33	0.055
50	26.67	34.45	4.72	0.30	22.43	20	26.76	34.38	22.35	0.110
100	21.72	34.87	4.55	0.41	24.22	30	26.73	34.41	22.38	0.165
198	10.84	34.70	0.45	2.65	26.59	50	26.67	34.45	22.43	0.274
296	9.71	34.65	0.69	2.72	26.75	75	26.11	34.73	22.82	0.406
394	8.65	34.63	0.83	2.75	26.90	100	21.72	34.87	24.22	0.516
590	6.98	34.54	0.67	3.03	27.08	150	12.70	34.58	26.15	0.658
786	5.40	34.51	1.39	3.11	27.26	200	10.81	34.70	26.60	0.743
982	4.44	34.56	1.23	3.19	27.41	250	10.24	34.69	26.69	0.816
1472	3.16	34.60	1.76	3.08	27.57	300	9.67	34.65	26.75	0.885
						400	8.59	34.63	26.91	1.015
						500	7.75	34.58	27.00	1.133
						600	6.90	34.54	27.09	1.245
						700	6.10	34.52	27.18	1.348
						800	5.32	34.52	27.28	1.442
						1000	4.40	34.56	27.42	1.609

POFI

HMS-2

OBSERVED					COMPUTED	INTERPOLATED				COMPUTED
Z	T	S	O_2	PO_4-P	σ_t	Z	T	S	σ_t	ΔD
m	°C	‰	ml/L	µg at/L	g/L	m	°C	‰	g/L	dyn. m
44	HUGH M. SMITH; February 25, 1950; 1045 GCT; 08°53'N, 157°54'W; wind, 060°, force 5; weather, partly cloudy; sea, slight; wire angle, 4°.									
0	26.5	34.38	4.79	0.38	22.43	0	26.50	34.38	22.43	0.000
10	26.46	34.36	4.71	0.31	22.43	10	26.46	34.36	22.43	0.054
49	26.45	34.36	4.71	0.28	22.43	20	26.46	34.36	22.43	0.108
97	19.58	34.72	4.01	0.86	24.67	30	26.45	34.36	22.43	0.163
194	10.70	34.69	0.53	2.68	26.61	50	26.45	34.36	22.43	0.271
291	9.52	34.67	0.75	2.69	26.79	75	24.80	34.49	23.04	0.400
388	8.71	34.60	0.65	2.80	26.87	100	18.90	34.72	24.85	0.500
582	6.86	34.54	0.65	3.10	27.10	150	11.99	34.54	26.25	0.624
776	5.46	34.52	-	3.16	27.26	200	10.61	34.70	26.63	0.706
972	4.62	34.56	1.08	3.16	27.39	250	9.98	34.70	26.74	0.777
1419	3.26	34.56	1.71	3.07	27.53	300	9.45	34.66	26.80	0.844
						400	8.59	34.60	26.89	0.972
						500	7.70	34.57	27.00	1.092
						600	6.70	34.54	27.12	1.202
						700	5.91	34.53	27.21	1.302
						800	5.34	34.52	27.28	1.395
						1000	4.53	34.56	27.40	1.564
45	HUGH M. SMITH; February 25, 1950; 2015 GCT; 09°55'N, 157°54'W; wind, 080°, force 4; weather, cloudy; sea, moderate; wire angle, 32°.									
0	26.1	34.43	5.23	0.42	22.59	0	26.10	34.43	22.59	0.000
9	26.14	34.42	5.07	0.40	22.57	10	26.14	34.42	22.57	0.053
42	26.12	34.42	4.71	0.40	22.58	20	26.13	34.42	22.58	0.106
80	20.14	34.81	4.63	0.54	24.60	30	26.12	34.42	22.58	0.158
156	11.53	34.49	0.95	2.54	26.30	50	26.12	34.42	22.58	0.264
231	10.19	34.74	0.45	2.75	26.74	75	21.60	34.84	24.23	0.377
307	9.36	34.63	0.41	-	26.79	100	16.20	34.66	25.46	0.456
462	8.14	34.61	0.56	3.12	26.97	150	11.99	34.51	26.23	0.566
622	6.51	34.51	0.61	3.25	27.12	200	10.61	34.66	26.60	0.649
788	5.44	34.58	0.84	3.30	27.31	250	9.97	34.71	26.75	0.720
1242	3.76	34.60	1.53	3.25	27.51	300	9.42	34.64	26.79	0.787
						400	8.62	34.62	26.90	0.915
						500	7.77	34.59	27.01	1.034
						600	6.71	34.52	27.10	1.145
						700	6.01	34.54	27.21	1.246
						800	5.38	34.58	27.32	1.337
						1000	4.67	34.59	27.41	1.502
46	HUGH M. SMITH; February 26, 1950; 0733, 0840 GCT; 11°02'N, 158°06'W; wind, 080°, force 5; weather, partly cloudy; sea, rough; wire angle, 45°, 41°.									
0	25.9	34.34	4.77	0.42	22.59	0	25.90	34.34	22.59	0.000
6	25.86	34.36	4.77	0.30	22.62	10	25.86	34.36	22.62	0.053
33	25.84	34.34	4.73	0.35	22.61	20	25.85	34.35	22.61	0.105
67	25.58	34.51	4.78	0.35	22.82	30	25.84	34.34	22.61	0.158
134	14.36	34.60	3.30	1.25	25.82	50	25.84	34.34	22.61	0.263
202	11.10	34.51	1.25	2.40	26.39	75	24.30	34.88	23.48	0.384
						100	20.10	34.81	24.61	0.482
270	9.79	34.65	0.55	2.63	26.73	150	13.22	34.57	26.03	0.617
444	8.72	34.60	0.65	2.86	26.87	200	11.15	34.51	26.39	0.710
590	7.04	34.58	0.61	3.09	27.10	250	10.08	34.62	26.66	0.788
910	5.02	34.52	1.01	3.16	27.32	300	9.52	34.64	26.77	0.858
1371	3.43	34.67	1.53	3.11	27.60	400	9.03	34.62	26.84	0.990
						500	8.12	34.60	26.96	1.115
						600	6.97	34.58	27.11	1.227
						700	6.25	34.56	27.19	1.329
						800	5.64	34.54	27.26	1.424
						1000	4.71	34.55	27.37	1.599

OBSERVED					COMPUTED	INTERPOLATED				COMPUTED
Z	T	S	O_2	PO_4-P	σ_t	Z	T	S	σ_t	ΔD
m	°C	‰	ml/L	µg at/L	g/L	m	°C	‰	g/L	dyn. m
HUGH M. SMITH; February 26, 1950; 1746 GCT; 12°01'N, 158°03'W; wind, 080°, force 6; weather, partly cloudy; sea, rough; wire angle, 35°.										47
0	25.7	34.42	4.71	0.43	22.71	0	25.70	34.42	22.71	0.000
8	25.71	34.40	4.75	0.42	22.69	10	25.71	34.40	22.69	0.052
39	25.70	34.38	4.72	0.41	22.68	20	25.71	34.39	22.69	0.103
75	23.13	34.97	5.07	0.39	23.89	30	25.70	34.38	22.68	0.155
148	17.10	34.67	4.15	0.79	25.25	50	25.70	34.37	22.67	0.259
224	11.02	34.47	1.06	2.61	26.38	75	23.13	34.97	23.89	0.375
300	9.67	34.58	0.58	2.88	26.70	100	20.72	34.94	24.54	0.469
454	8.24	34.56	-	-	26.91	150	16.85	34.66	25.31	0.622
612	6.78	34.51	0.50	3.21	27.08	200	12.35	34.38	26.06	0.741
772	5.62	34.51	0.54	3.35	27.23	250	10.40	34.55	26.55	0.830
1188	3.79	34.56	1.29	3.38	27.48	300	9.67	34.58	26.70	0.904
						400	8.72	34.57	26.85	1.039
						500	7.81	34.55	26.97	1.162
						600	6.89	34.52	27.08	1.276
						700	6.06	34.51	27.18	1.379
						800	5.50	34.51	27.25	1.476
						1000	4.63	34.54	27.37	1.650
HUGH M. SMITH; February 27, 1950; 0448 GCT; 13°02'N, 157°51'W; wind, 070°, force 5; weather, cloudy; sea, rough; wire angle, 5°.										48
0	25.3	34.36	4.81	0.37	22.79	0	25.30	34.36	22.79	0.000
10	25.33	34.33	4.80	0.30	22.76	10	25.33	34.33	22.76	0.051
49	25.30	34.34	4.77	0.31	22.77	20	25.32	34.33	22.76	0.102
97	21.13	34.97	5.08	0.35	24.44	30	25.31	34.34	22.77	0.153
194	11.90	34.31	2.51	2.00	26.09	50	25.30	34.34	22.77	0.255
290	9.92	34.60	0.54	2.87	26.67	75	24.17	34.77	23.44	0.375
387	8.48	34.51	0.56	2.90	26.83	100	21.30	34.98	24.42	0.476
580	6.26	34.51	0.53	3.13	27.16	150	17.69	34.71	25.14	0.637
774	5.08	34.51	1.00	3.17	27.30	200	11.32	34.40	26.27	0.754
968	-	34.54	1.20	3.13	-	250	10.21	34.56	26.59	0.837
1456	2.98	34.60	1.79	3.03	27.59	300	9.85	34.60	26.68	0.910
						400	8.27	34.51	26.87	1.045
						500	7.03	34.51	27.05	1.163
						600	6.11	34.51	27.17	1.267
						700	5.47	34.51	27.25	1.362
						800	5.00	34.52	27.32	1.450
						1000	4.40	34.54	27.40	1.615
HUGH M. SMITH; February 27, 1950; 1427 GCT; 14°00'N, 157°51'W; wind, 060°, force 5; weather, cloudy; sea, rough; wire angle, 15°.										49
0	25.0	34.11	5.10	0.41	22.69	0	25.00	34.11	22.69	0.000
10	24.99	34.11	4.87	0.38	22.69	10	24.99	34.11	22.69	0.052
47	24.99	34.09	4.85	0.40	22.68	20	24.99	34.10	22.69	0.103
93	18.68	34.36	4.19	0.83	24.63	30	24.99	34.10	22.69	0.155
186	10.95	34.45	-	2.47	26.38	50	24.99	34.09	22.68	0.259
279	9.32	34.51	0.64	2.80	26.70	75	24.93	34.09	22.70	0.389
372	8.30	34.52	0.42	2.90	26.87	100	17.75	34.53	24.99	0.492
558	6.32	34.49	0.51	3.05	27.13	150	12.96	34.33	25.90	0.620
745	5.08	34.49	0.71	3.08	27.29	200	10.70	34.48	26.44	0.715
932	4.26	34.54	-	3.08	27.41	250	9.84	34.50	26.61	0.793
1412	3.04	34.60	1.84	2.94	27.58	300	9.08	34.51	26.74	0.865
						400	8.01	34.52	26.92	0.994
						500	6.94	34.50	27.05	1.110
						600	5.98	34.49	27.17	1.213
						700	5.34	34.49	27.25	1.308
						800	4.84	34.50	27.32	1.396
						1000	4.08	34.55	27.44	1.555

POFI

HMS-2

	OBSERVED					COMPUTED	INTERPOLATED				COMPUTED
	Z	T	S	O_2	PO_4-P	σ_t	Z	T	S	σ_t	ΔD
	m	°C	‰	ml/L	μg at/L	g/L	m	°C	‰	g/L	dyn. m
50	HUGH M. SMITH; February 27, 1950; 2341 GCT; 14°57'N, 157°59'W; wind, 060°, force 5; weather, partly cloudy; sea, rough; wire angle, 45°.										
	0	25.1	34.25	4.83	0.43	22.77	0	25.1	34.25		
	8	25.10	34.25	4.80	0.34	22.77	10	25.10	34.25		
	32	25.07	34.25	4.87	0.60	22.76	20	25.08	34.25		
	58	25.07	34.23	4.83	0.41	22.76	30	25.07	34.25		
	110	19.51	34.92	4.78	0.46	24.85	50	25.07	34.24		
	166	14.79	34.42	3.95	0.98	25.59	75	25.07	34.23		
	226a)	11.16	34.29	2.14	2.17	26.21	100	20.62	34.99		
	1104	4.14	34.52	1.24	3.20	27.41	150	16.94	34.65		
							200	12.54	34.28		
							250	10.13	34.36		
51	HUGH M. SMITH; February 28, 1950; 1753 GCT; 17°01'N, 157°56'W; wind, 060°, force 5; weather, cloudy; sea, moderate; wire angle, 22°.										
	0	24.0	34.72	4.95	0.48	23.45	0	24.00	34.72	23.45	0.000
	9	24.02	34.69	4.90	0.41	23.42	10	24.02	34.69	23.42	0.045
	45	24.00	34.70	4.91	0.38	23.43	20	24.01	34.70	23.43	0.089
	90	23.40	35.05	4.93	0.38	23.88	30	24.00	34.70	23.44	0.134
	182	18.86	34.87	4.75	0.51	24.98	50	24.00	34.70	23.44	0.223
	274	10.77	34.25	2.79	2.05	26.25	75	23.75	34.85	23.62	0.333
	366	8.96	34.40	0.91	2.83	26.67	100	23.19	35.09	23.97	0.437
	552	7.04	34.49	0.52	3.18	27.03	150	20.45	35.01	24.67	0.620
	740	5.66	34.49	0.69	3.28	27.21	200	18.07	34.78	25.11	0.777
	931	4.75	34.49	0.90	3.37	27.32	250	12.03	34.23	26.01	0.902
	1421	3.37	34.58	1.55	3.19	27.54	300	10.06	34.31	26.42	0.996
							400	8.58	34.43	26.76	1.148
							500	7.53	34.48	26.96	1.276
							600	6.60	34.49	27.09	1.389
							700	5.89	34.49	27.19	1.492
							800	5.38	34.49	27.25	1.587
							1000	4.54	34.50	27.35	1.763
52	HUGH M. SMITH; March 1, 1950; 1232 GCT; 19°00'N, 157°42'W; wind, 040°, force 3; weather, cloudy; sea, moderate; wire angle, 5°.										
	0	24.0	34.69	4.98	0.42	23.43	0	24.00	34.69	23.43	0.000
	10	24.00	34.67	4.94	0.35	23.41	10	24.00	34.67	23.41	0.045
	49	23.99	34.70	4.94	0.33	23.44	20	24.00	34.68	23.42	0.090
	98	23.94	34.76	4.96	0.34	23.50	30	23.99	34.69	23.43	0.134
	196	19.62	34.92	4.69	0.42	24.82	50	23.99	34.70	23.44	0.224
	294	12.07	34.23	3.48	1.47	26.00	75	23.97	34.73	23.47	0.335
	392	8.57	34.23	2.35	2.31	26.60	100	23.94	34.76	23.50	0.447
	588	5.97	34.29	0.99	3.02	27.02	150	22.01	35.14	24.34	0.649
	783	5.05	34.45	1.02	3.05	27.26	200	19.45	34.90	24.85	0.820
	979	4.27	34.51	1.15	3.08	27.39	250	15.55	34.51	25.49	0.963
	1473	3.02	34.58	1.61	3.03	27.57	300	11.75	34.23	26.06	1.078
							400	8.40	34.23	26.63	1.255
							500	6.79	34.23	26.86	1.393
							600	5.90	34.30	27.03	1.512
							700	5.39	34.39	27.17	1.617
							800	4.98	34.46	27.27	1.712
							1000	4.23	34.51	27.39	1.880

a) All values between 226 and 1104 meters rejected because three Nansen bottles pretripped.

OBSERVED					COMPUTED	INTERPOLATED				COMPUTED
Z	T	S	O_2	PO_4-P	σ_t	Z	T	S	σ_t	ΔD
m	°C	‰	ml/L	µg at/L	g/L	m	°C	‰	g/L	dyn. m

POFI

HMS-2
HMS-5

HUGH M. SMITH; March 2, 1950; 0718 GCT; 20°54'N, 158°04'W; wind, 090°, force 5; weather, partly cloudy; sea, slight; wire angle, 10°. 53

0	24.2	34.63	4.99	0.43	23.32	0	24.20	34.63	23.32	0.000
10	24.19	34.61	4.95	0.34	23.31	10	24.19	34.61	23.31	0.046
48	24.18	34.63	4.95	0.35	23.33	20	24.19	34.62	23.32	0.092
96	23.19	35.08	4.91	0.32	23.96	30	24.18	34.62	23.32	0.137
192	19.59	35.07	4.58	0.41	24.94	50	24.18	34.63	23.33	0.229
287	12.43	34.25	4.10	1.21	25.94	75	23.56	34.92	23.73	0.339
384	8.77	34.14	3.03	2.03	26.50	100	23.12	35.09	23.99	0.441
575	5.80	34.27	1.16	2.85	27.02	150	20.98	35.16	24.64	0.624
767	4.91	34.42	0.95	2.99	27.25	200	19.37	35.04	24.98	0.785
960	4.20	34.49	1.14	3.01	27.38	250	16.48	34.71	25.43	0.927
1448	3.04	34.58	1.69	2.92	27.57	300	11.70	34.20	26.04	1.044
						400	8.42	34.14	26.56	1.224
						500	6.65	34.18	26.84	1.367
						600	5.62	34.30	27.07	1.485
						700	5.15	34.38	27.19	1.587
						800	4.79	34.44	27.28	1.680
						1000	4.10	34.50	27.40	1.847

HUGH M. SMITH; June 30, 1950; 1955 GCT; 27°00'N, 175°11'W; wind, 050°, force 4; weather, cloudy; sea, moderate; wire angle, 20°.

0	24.80	35.46	4.89	0.34	23.77	0	24.80	35.46	23.77	0.000
9	25.12	35.46	4.86	0.42	23.67	10	25.10	35.46	23.68	0.042
46	24.11	35.43	5.03	0.23	23.95	20	25.05	35.46	23.69	0.084
91	-	35.17	5.24	0.24	-	30	25.02	35.46	23.70	0.126
182	16.52	34.67	4.96	0.43	25.39	50	23.68	35.41	24.07	0.207
274	13.98	34.49	4.98	0.77	25.81	75	21.68	35.23	24.50	0.299
365	12.09	34.34	4.99	0.91	26.08	100	20.03	35.06	24.82	0.382
551	8.06	34.05	4.18	1.67	26.54	150	18.38	34.87	25.10	0.534
738	5.09	34.05	2.03	2.56	26.93	200	16.00	34.64	25.49	0.672
926	3.93	34.23	0.90	2.86	27.20	250	14.51	34.54	25.74	0.794
1114	3.32	34.38	1.07	3.00	27.38	300	13.40	34.45	25.91	0.907
1402	2.69	34.45	1.54	2.93	27.49	400	11.32	34.28	26.18	1.113
						500	9.10	34.11	26.43	1.295
						600	7.17	34.03	26.65	1.455
						700	5.54	34.04	26.87	1.593
						800	4.60	34.10	27.03	1.712
						1000	3.67	34.30	27.29	1.912

HUGH M. SMITH; July 1, 1950; 1312 GCT; 25°02'N, 174°10'W; wind, 100°, force 4; weather, overcast; sea, moderate; wire angle, 0°. 2

0	26.10	34.94	4.85	0.26	22.98	0	26.10	34.94	22.98	0.000
10	26.30	34.92	4.71	0.25	22.90	10	26.30	34.92	22.90	0.049
50	25.43	35.32	5.13	0.13	23.47	20	26.30	34.96	22.93	0.099
100	23.16	35.37	5.13	0.81r	24.19	30	26.30	35.00	22.96	0.148
200	18.60	34.90	4.34	0.57	25.07	50	25.43	35.32	23.47	0.242
297	14.32	34.49	4.75	0.68	25.74	75	24.06	35.39	23.94	0.348
393	11.46	34.25	4.75	1.15	26.13	100	23.16	35.37	24.19	0.445
586	7.07	34.04	3.02	1.96	26.68	150	20.78	35.14	24.68	0.623
781	4.97	34.18	1.40	2.69	27.05	200	18.60	34.90	25.07	0.780
976	3.94	34.31	0.99	2.92	27.27	250	16.05	34.65	25.49	0.919
1171	3.20	34.40	1.43	2.80	27.41	300	14.19	34.48	25.76	1.041
1466	2.66	34.52	1.66	2.79	27.55	400	11.25	34.23	26.15	1.256
						500	8.72	34.08	26.46	1.437
						600	6.87	34.04	26.70	1.593
						700	5.72	34.10	26.90	1.727
						800	4.80	34.20	27.09	1.843
						1000	3.84	34.32	27.28	2.038

POFI

HMS-5

OBSERVED					COMPUTED	INTERPOLATED				COMPUTED
Z	T	S	O_2	PO_4-P	σ_t	Z	T	S	σ_t	ΔD
m	°C	‰	ml/L	µg at/L	g/L	m	°C	‰	g/L	dyn. m
3	HUGH M. SMITH; July 2, 1950; 0613, 0837 GCT; 22°58'N, 173°00'W; wind, 090°, force 4; weather, cloudy; sea, moderate; wire angle, 20°, 5°.									
0	26.10	34.94	4.69	0.33	22.98	0	26.10	34.94	22.98	0.000
9	26.32	34.92	4.67	0.22	22.89	10	26.32	34.92	22.89	0.049
47	26.24	34.92	4.86	0.26	22.92	20	26.30	34.92	22.90	0.099
94	23.65	35.19	–	0.32	23.91	30	26.28	34.92	22.91	0.149
186	20.52	34.58r	5.06	0.39	–	50	26.20	34.97	22.97	0.248
276	15.69	34.63	4.73	0.61	25.55	75	24.36	35.17	23.68	0.363
366	12.04	34.31	4.80	0.96	26.07	100	23.51	35.19	23.95	0.466
366	–	–	–	1.21	–	150	22.09	35.18	24.35	0.657
545	7.34	34.05	2.83	2.05	26.64	200	19.70	35.06	24.91	0.826
723	5.06	34.16	1.56	2.61	27.03	250	16.85	34.77	25.39	0.971
902	4.34	34.34	1.05	2.82	27.25	300	14.75	34.54	25.69	1.098
1081	3.69	34.42	1.55	2.72	27.38	400	10.99	34.22	26.19	1.314
1351	3.04	34.52	1.60	2.76	27.52	500	8.32	34.06	26.51	1.491
						600	6.37	34.06	26.78	1.640
1943	2.10	34.60	2.27	2.58	27.66	700	5.24	34.14	26.99	1.765
2443	1.71	34.63	2.68	2.02	27.72	800	4.70	34.24	27.13	1.875
2443	–	–	–	2.32	–	1000	3.97	34.39	27.33	2.062
2943	1.56	34.54r	2.91	2.16	–					
3943	1.45	34.67	3.58	2.32	27.77					
4	HUGH M. SMITH; July 3, 1950; 0232 GCT; 21°00'N, 172°00'W; wind, 080°, force 5; weather, overcast; sea, moderate; wire angle, 24°.									
0	26.00	34.96	4.87	0.06	23.02	0	26.00	34.96	23.02	0.000
9	26.22	34.92	4.82	0.04	22.92	10	26.22	34.92	22.93	0.049
46	26.19	34.97	4.88	0.02	22.97	20	26.21	34.93	22.94	0.098
90	23.18	35.17	5.07	0.07	24.03	30	26.20	34.94	22.95	0.148
178	20.06	35.14	4.57	0.22	24.87	50	26.18	34.96	22.97	0.246
264	13.64	34.43	4.83	0.66	25.84	75	23.79	35.13	23.82	0.360
349	10.74	34.18	4.58	1.00	26.20	100	22.86	35.18	24.13	0.459
522	6.78	34.07	2.73	1.99	26.74	150	21.28	35.21	24.60	0.640
697	5.27	34.25	1.22	2.46	27.07	200	19.00	35.02	25.06	0.800
874	4.38	34.40	1.27	2.49	27.29	250	14.62	34.52	25.70	0.933
1053	3.85	34.49	1.46	2.47	27.42	300	12.40	34.32	26.00	1.045
1322	3.10	34.51	1.73	2.43	27.51	400	9.40	34.09	26.36	1.237
						500	7.12	34.05	26.68	1.397
						600	6.00	34.15	26.90	1.531
						700	5.26	34.26	27.08	1.646
						800	4.72	34.34	27.21	1.748
						1000	3.98	34.47	27.39	1.922
5	HUGH M. SMITH; July 3, 1950; 1829 GCT; 19°00'N, 171°52'W; wind, 080°, force 5; weather, cloudy; sea, smooth; wire angle, 35°.									
0	26.40	34.74	4.84	0.38	22.73	0	26.40	34.74	22.73	0.000
8	26.52	34.63	4.81	0.26	22.61	10	26.52	34.63	22.61	0.052
41	26.52	34.63	4.70	0.28	22.61	20	26.52	34.63	22.61	0.104
82	24.73	34.96	5.10	0.22	23.41	30	26.52	34.63	22.61	0.157
163	20.54	35.10	4.48	0.38	24.71	50	26.50	34.64	22.63	0.262
235	15.92	34.65	4.44	0.61	25.52	75	25.12	34.91	23.26	0.386
310	11.95	34.27	4.47	1.12	26.05	100	24.02	35.04	23.69	0.497
458	7.67	34.27	1.84	2.46	26.77	150	21.40	35.14	24.51	0.691
614	5.85	34.27	1.19	2.81	27.02	200	18.85	34.94	25.03	0.853
773	5.08	34.40	1.25	2.99	27.21	250	15.00	34.56	25.65	0.989
939	4.39	34.47	1.42	2.92	27.35	300	12.42	34.31	25.99	1.102
1203	3.50	34.52	1.52	3.08	27.47	400	9.07	34.26	26.55	1.285
						500	7.03	34.26	26.85	1.428
						600	5.96	34.26	26.99	1.550
						700	5.43	34.34	27.12	1.659
						800	4.94	34.41	27.24	1.757
						1000	4.14	34.49	27.39	1.929

OBSERVED					COMPUTED	INTERPOLATED				COMPUTED
Z	T	S	O_2	PO_4-P	σ_t	Z	T	S	σ_t	ΔD
m	°C	‰	ml/L	µg at/L	g/L	m	°C	‰	g/L	dyn. m

6

HUGH M. SMITH; July 4, 1950; 1040 GCT; 17°01'N, 171°46'W; wind, 100°, force 3; weather, partly cloudy; sea, moderate; wire angle, 20°.

0	26.30	34.54	4.82	0.35	22.61	0	26.30	34.54	22.61	0.000
9	26.42	34.54	4.76	0.28	22.57	10	26.42	34.54	22.58	0.053
47	26.40	34.54	4.83	0.27	22.58	20	26.42	34.54	22.58	0.105
94	25.20	34.67	4.97	0.26	23.05	30	26.40	34.54	22.58	0.158
186	20.78	34.92	4.58	0.48	24.51	50	26.40	34.54	22.58	0.264
271	13.09	34.38	3.47	1.15	25.91	75	26.40	34.54	22.58	0.397
353	9.68	34.23	2.62	1.91	26.43	100	24.80	34.73	23.22	0.522
523	6.70	34.34	1.10	2.57	26.96	150	22.70	34.94	23.99	0.739
701	5.63	34.45	1.06	2.67	27.19	200	19.92	34.88	24.71	0.921
883	4.75	34.47	1.14	2.62	27.31	250	14.78	34.52	25.67	1.064
1067	4.02	34.54	1.33	2.17r	27.44	300	11.60	34.28	26.12	1.173
1346	3.28	34.54	1.59	2.72	27.51	400	8.52	34.26	26.63	1.346
						500	6.99	34.33	26.91	1.481
						600	6.14	34.40	27.08	1.596
						700	5.66	34.45	27.18	1.699
						800	5.14	34.46	27.25	1.794
						1000	4.27	34.53	27.41	1.964

7

HUGH M. SMITH; July 5, 1950; 0138, 0241 GCT; 15°00'N, 171°54'W; wind, 080°, force 5; weather, partly cloudy; sea, moderate; wire angle, 24°, 35°.

0	26.70	34.56	4.80	0.37	22.50	0	26.70	34.56	22.50	0.000
9	26.75	34.56	4.73	0.31	22.49	10	26.74	34.56	22.49	0.054
46	26.57	34.54	4.78	0.33	22.53	20	26.68	34.56	22.51	0.107
90	26.53	34.56	4.78	0.30	22.56	30	26.61	34.55	22.52	0.161
175	19.44	34.87	4.26	0.59	24.83	50	26.56	34.54	22.53	0.267
257	12.72	34.34	3.30	1.43	25.96	75	26.53	34.55	22.55	0.401
339	9.60	34.25	2.63	2.04	26.45	100	26.52	34.56	22.56	0.534
511	6.84	34.43	0.78	2.99	27.01	150	22.70	34.94	23.99	0.767
690	5.65	34.45	0.90	3.11	27.18	200	16.75	34.66	25.33	0.934
874	4.77	34.52	1.01	3.18	27.34	250	13.00	34.36	25.92	1.056
1059	4.16	34.52	–	3.13	27.41	300	10.97	34.26	26.22	1.157
						400	8.36	34.34	26.72	1.321
1300	3.38	34.54	1.55	3.10	27.50	500	6.98	34.43	26.99	1.448
1771	2.17	34.58	2.18	2.81	27.64	600	6.13	34.44	27.12	1.558
2247	1.94	34.61	2.59	2.68	27.68	700	5.58	34.46	27.20	1.658
2734	1.70	34.63	2.90	2.64	27.72	800	5.05	34.50	27.29	1.750
						1000	4.33	34.52	27.39	1.917

8

HUGH M. SMITH; July 5, 1950; 1140 GCT; 14°00'N, 171°57'W; wind, 100°, force 5; weather, cloudy; sea, moderate; wire angle, 28°.

0	26.30	34.54	4.81	0.28	22.61	0	26.30	34.54	22.61	0.000
8	26.52	34.52	4.76	0.26	22.54	10	26.52	34.52	22.53	0.053
42	26.53	34.52	4.83	0.25	22.53	20	26.52	34.52	22.53	0.106
84	25.36	34.74	4.95	0.20	23.06	30	26.52	34.52	22.53	0.159
169	18.94	34.88	4.26	0.46	24.96	50	26.53	34.52	22.53	0.266
254	11.95	34.29	3.53	1.26	26.07	75	26.50	34.52	22.54	0.400
341	9.22	34.34	1.64	2.14	26.59	100	24.04	34.88	23.56	0.522
516	7.28	34.43	0.81	2.56	26.95	150	20.55	34.94	24.59	0.716
692	5.84	34.47	0.96	2.72	27.18	200	16.41	34.66	25.41	0.867
870	5.14	34.47	1.09	2.76	27.26	250	12.20	34.30	26.03	0.985
1052	4.42	34.49	1.25	2.70	27.36	300	10.10	34.34	26.44	1.078
1333	3.53	34.52	1.60	2.68	27.47	400	8.52	34.38	26.73	1.231
						500	7.44	34.43	26.93	1.361
						600	6.55	34.46	27.08	1.476
						700	5.80	34.47	27.18	1.579
						800	5.37	34.47	27.23	1.676
						1000	4.66	34.48	27.32	1.856

POFI

HMS-5

	OBSERVED					COMPUTED	INTERPOLATED				COMPUTED
	Z	T	S	O_2	PO_4-P	σ_t	Z	T	S	σ_t	ΔD
	m	°C	‰	ml/L	µg at/L	g/L	m	°C	‰	g/L	dyn. m
9	HUGH M. SMITH; July 5, 1950; 2015 GCT; 13°00'N, 172°01'W; wind, 070°, force 5; weather, overcast; sea, moderate; wire angle, 30°.										
	0	26.20	34.65	4.82	0.40	22.73	0	26.20	34.65	22.73	0.000
	9	26.42	34.61	4.75	0.32	22.63	10	26.42	34.61	22.63	0.052
	42	26.42	34.61	4.79	0.30	22.63	20	26.42	34.61	22.63	0.104
	83	26.43	34.61	4.79	0.31	22.63	30	26.42	34.61	22.63	0.157
	162	19.22	34.83	4.30	0.58	24.85	50	26.42	34.61	22.63	0.261
	239	11.80	34.38	2.30	1.81	26.16	75	26.43	34.61	22.63	0.393
	317	9.46	34.49	0.94	2.51	26.66	100	25.86	34.67	22.85	0.522
	481	7.60	34.49	0.92	2.84	26.95	150	20.54	34.90	24.56	0.734
	651	6.21	34.51	0.84	3.02	27.16	200	15.47	34.54	25.53	0.883
	819	5.18	34.51	1.19	3.00	27.29	250	11.35	34.42	26.28	0.991
	991	4.48	34.51	1.31	2.98	27.37	300	9.79	34.49	26.61	1.074
	1263	3.66	34.56	1.60	3.05	27.49	400	8.34	34.49	26.84	1.213
							500	7.43	34.49	26.98	1.336
							600	6.64	34.50	27.10	1.448
							700	5.88	34.51	27.20	1.550
							800	5.26	34.51	27.28	1.643
							1000	4.44	34.51	27.37	1.814
10	HUGH M. SMITH; July 6, 1950; 0435 GCT; 12°00'N, 172°00'W; wind, 070°, force 5; weather, cloudy; sea, moderate; wire angle, 35°.										
	0	26.60	34.60	4.76	0.32	22.57	0	26.60	34.60	22.57	0.000
	8	26.82	34.60	4.73	0.27	22.50	10	26.81	34.60	22.50	0.053
	38	26.76	34.58	4.75	0.28	22.50	20	26.79	34.59	22.50	0.107
	76	26.14	34.63	4.82	0.30	22.73	30	26.78	34.58	22.49	0.160
	152	16.21	34.60	3.70	0.86	25.41	50	26.65	34.58	22.53	0.268
	228	11.14	34.47	1.21	2.00	26.35	75	26.15	34.63	22.73	0.399
	304	9.90	34.61	0.71	2.41	26.68	100	22.80	34.93	23.96	0.513
	458	7.88	34.56	0.72	2.47	26.97	150	16.78	34.65	25.32	0.681
	614	6.64	34.52	0.81	2.73	27.11	200	12.65	34.37	25.99	0.801
	774	5.48	34.52	0.90	2.79	27.26	250	10.67	34.55	26.50	0.892
	940	4.73	34.54	1.04	2.72	27.36	300	9.96	34.61	26.67	0.968
	1205	3.80	34.56	1.40	2.83	27.48	400	8.59	34.59	26.88	1.103
							500	7.46	34.55	27.02	1.222
							600	6.78	34.53	27.10	1.332
							700	6.00	34.52	27.19	1.434
							800	5.32	34.52	27.28	1.527
							1000	4.43	34.55	27.40	1.696
11	HUGH M. SMITH; July 6, 1950; 1324 GCT; 11°03'N, 172°03'W; wind, 060°, force 5; weather, overcast; sea, moderate; wire angle, 28°.										
	0	26.80	34.65	4.75	0.34	22.54	0	26.80	34.65	22.54	0.000
	9	27.04	34.63	4.69	0.27	22.45	10	27.04	34.63	22.45	0.054
	42	27.10	34.67	4.71	0.25	22.46	20	27.06	34.64	22.45	0.108
	82	26.99	34.69	4.69	0.26	22.51	30	27.08	34.65	22.45	0.162
	159	15.91	34.58	3.70	0.88	25.46	50	27.08	34.68	22.47	0.270
	234	10.66	34.40	1.63	2.15	26.39	75	27.01	34.68	22.50	0.405
	309	9.32	34.58	0.60	2.54	26.76	100	25.06	34.83	23.22	0.531
	460	7.63	34.56	0.61	2.82	27.00	150	16.80	34.65	25.31	0.716
	610	6.26	34.51	0.90	2.95	27.15	200	12.50	34.37	26.02	0.835
	763	5.28	34.52	1.11	2.91	27.28	250	10.28	34.50	26.53	0.926
	921	4.62	34.52	1.58	2.87	27.36	300	9.42	34.58	26.74	0.999
	1187	3.82	34.56	1.70	2.93	27.48	400	8.30	34.57	26.91	1.129
							500	7.27	34.54	27.04	1.246
							600	6.37	34.51	27.14	1.352
							700	5.63	34.52	27.24	1.449
							800	5.12	34.52	27.30	1.539
							1000	4.36	34.53	27.40	1.706

OBSERVED					COMPUTED	INTERPOLATED				COMPUTED
Z	T	S	O_2	PO_4-P	σ_t	Z	T	S	σ_t	ΔD
m	°C	‰	ml/L	µg at/L	g/L	m	°C	‰	g/L	dyn. m

HUGH M. SMITH; July 6, 1950; 2230 GCT; 09°54'N, 172°02'W; wind, variable, force 2; weather, overcast; sea, smooth; wire angle, 3°. 12

0	26.80	34.56	4.75	0.44	22.47	0	26.80	34.56	22.47	0.000
10	27.12	34.60	4.69	0.46	22.40	10	27.12	34.60	22.40	0.054
50	27.10	34.63	4.73	0.42	22.43	20	27.12	34.61	22.41	0.109
98	20.06	34.94	4.73	0.53	24.72	30	27.11	34.62	22.42	0.163
196	11.37	34.61	0.81	2.16	26.42	50	27.10	34.63	22.43	0.272
292	9.80	34.67	0.52	2.53	26.75	75	25.20	34.81	23.16	0.399
388	8.86	34.61	0.54	2.72	26.85	100	19.98	34.93	24.73	0.500
581	6.78	34.51	0.88	2.94	27.08	150	12.90	34.40	25.97	0.634
775	5.44	34.51	0.87	3.12	27.26	200	11.30	34.62	26.44	0.728
971	4.48	34.52	1.25	3.03	27.37	250	10.42	34.69	26.66	0.805
971	-	-	-	2.77	-	300	9.72	34.66	26.75	0.876
1168	3.74	34.54	1.53	2.71	27.47	400	8.72	34.60	26.87	1.008
1466	3.08	34.56	2.01	2.79	27.55	500	7.59	34.54	26.99	1.130
1466	-	-	-	2.43	-	600	6.60	34.51	27.11	1.241
						700	5.91	34.51	27.20	1.343
						800	5.32	34.51	27.27	1.437
						1000	4.38	34.52	27.39	1.609

HUGH M. SMITH; July 7, 1950; 0636 GCT; 08°54'N, 172°00'W; wind, 180°, force 4; weather, overcast; sea, calm; wire angle, 20°. 13

0	26.90	34.27	4.75	0.47	22.22	0	26.90	34.27	22.22	0.000
9	27.45	34.27	4.68	0.35	22.05	10	27.45	34.27	22.05	0.057
46	27.35	34.45	4.75	0.34	22.21	20	27.42	34.33	22.10	0.115
91	22.54	34.81	4.86	0.42	23.94	30	27.39	34.37	22.14	0.172
181	11.06	34.49	1.28	2.27	26.39	50	27.32	34.46	22.23	0.285
271	9.98	34.63	0.54	2.63	26.69	75	26.60	34.59	22.56	0.422
362	9.02	34.58	0.46	2.80	26.81	100	20.86	34.88	24.46	0.533
543	7.34	34.52	0.55	3.03	27.01	150	12.21	34.41	26.11	0.669
724	5.72	34.49	0.83	3.17	27.21	200	10.80	34.57	26.50	0.758
907	4.73	34.56	1.13	3.17	27.38	250	10.19	34.64	26.66	0.834
1092	4.04	34.54	1.36	3.14	27.44	300	9.66	34.62	26.73	0.905
1374	3.20	34.54	1.56	2.90	27.52	400	8.68	34.57	26.85	1.038
						500	7.73	34.54	26.97	1.161
						600	6.81	34.50	27.07	1.274
						700	5.91	34.49	27.18	1.378
						800	5.23	34.53	27.30	1.471
						1000	4.38	34.55	27.41	1.637

HUGH M. SMITH; July 7, 1950; 1412 GCT; 08°00'N, 171°58'W; wind, calm; weather, overcast; sea, calm; wire angle, 4°. 14

0	26.90	34.14	4.75	0.27	22.12	0	26.90	34.14	22.12	0.000
10	27.21	34.18	4.71	0.20	22.06	10	27.21	34.18	22.06	0.057
50	27.23	34.20	4.78	0.21	22.06	20	27.21	34.18	22.06	0.115
99	18.70	34.78	3.89	0.61	24.95	30	27.22	34.19	22.06	0.173
197	10.76	34.61	0.61	2.14	26.53	50	27.23	34.20	22.06	0.289
293	9.79	34.65	0.55	2.34	26.73	75	24.95	34.64	23.11	0.421
390	8.87	34.65	0.56	2.38	26.88	100	18.68	34.77	24.95	0.519
582	6.70	34.51	0.68	2.65	27.10	150	11.93	34.47	26.21	0.642
776	5.39	34.51	0.82	2.52	27.26	200	10.66	34.61	26.55	0.727
968	4.45	34.56	1.27	2.56	27.41	250	10.20	34.64	26.66	0.801
1161	3.72	34.56	1.48	2.56	27.49	300	9.68	34.65	26.75	0.872
1453	2.98	34.56	1.54	2.44	27.56	400	8.80	34.64	26.89	1.002
						500	7.62	34.56	27.01	1.122
						600	6.55	34.50	27.11	1.232
						700	5.82	34.49	27.19	1.333
						800	5.24	34.52	27.29	1.427
						1000	4.34	34.56	27.42	1.592

POFI

HMS-5

	OBSERVED					COMPUTED	INTERPOLATED				COMPUTED
	Z	T	S	O_2	PO_4-P	σ_t	Z	T	S	σ_t	ΔD
	m	°C	‰	ml/L	µg at/L	g/L	m	°C	‰	g/L	dyn. m
15	HUGH M. SMITH; July 7, 1950; 2250 GCT; 06°59'N, 171°46'W; wind, calm; weather, cloudy; sea, smooth; wire angle, 27°.										
	0	28.20	34.33	4.71	0.43	21.85	0	28.20	34.33	21.85	0.000
	9	27.20	34.27	4.67	0.37	22.13	10	27.20	34.28	22.13	0.058
	44	27.18	34.34	4.71	0.34	22.18	20	27.19	34.31	22.16	0.115
	87	23.81	34.70	4.93	0.38	23.49	30	27.18	34.32	22.17	0.172
	172	11.92	34.52	1.31	2.17	26.25	50	27.12	34.36	22.22	0.285
	255	9.86	34.65	0.89	2.52	26.72	75	26.20	34.49	22.61	0.422
	338	9.09	34.63	0.81	2.68	26.83	100	21.02	34.82	24.37	0.533
	506	7.62	34.60	0.97	2.88	27.04	150	14.35	34.55	25.78	0.679
	677	6.24	34.56	1.09	3.08	27.20	200	11.07	34.60	26.47	0.776
	851	5.12	34.56	1.36	3.02	27.33	250	9.96	34.64	26.70	0.852
	1026	4.37	34.58	1.57	3.02	27.43	300	9.41	34.63	26.78	0.921
	1299	3.42	34.58	1.67	3.14	27.53	400	8.57	34.63	26.92	1.036
							500	7.70	34.60	27.02	1.141
							600	6.85	34.57	27.12	1.250
							700	6.07	34.56	27.22	1.350
							800	5.40	34.56	27.30	1.442
							1000	4.43	34.58	27.43	1.606
16	HUGH M. SMITH; July 8, 1950; 0719 GCT; 06°02'N, 171°56'W; wind, calm; weather, cloudy; sea, calm; wire angle, 30°.										
	0	28.20	34.81	4.73	0.22	22.21	0	28.20	34.81	22.21	0.000
	9	27.72	34.72	4.63	0.27	22.30	10	27.72	34.72	22.30	0.056
	43	27.74	34.97	4.66	0.35	22.48	20	27.73	34.80	22.35	0.111
	85	26.40	34.99	4.30	0.40	22.92	30	27.74	34.88	22.41	0.166
	165	12.68	34.54	1.79	1.71	26.12	50	27.71	34.98	22.50	0.274
	245	10.07	34.69	0.77	2.22	26.72	75	27.40	34.99	22.60	0.407
	325	9.41	34.67	1.06	2.16	26.81	100	23.20	34.94	23.85	0.525
	485	8.12	34.58	0.88	2.46	26.95	150	13.70	34.55	25.92	0.681
	649	6.53	34.52	0.99	2.49	27.13	200	11.10	34.65	26.50	0.773
	818	5.26	34.54	1.33	2.75	27.30	250	10.03	34.68	26.72	0.848
	994	4.44	34.54	1.54	2.70	27.40	300	9.60	34.67	26.78	0.916
	1273	3.48	34.60	1.92	2.69	27.54	400	8.83	34.62	26.87	1.046
							500	8.00	34.57	26.96	1.169
							600	7.07	34.54	27.07	1.284
							700	6.14	34.53	27.18	1.388
							800	5.38	34.54	27.29	1.482
							1000	4.45	34.54	27.39	1.651
17	HUGH M. SMITH; July 8, 1950; 1700, 1817 GCT; 05°00'N, 172°02'W; wind, calm; weather, cloudy; sea, calm; wire angle, 0°, 0°.										
	0	27.80	34.70	4.55	0.35	22.26	0	27.80	34.70	22.26	0.000
	10	27.90	34.70	4.67	0.33	22.22	10	27.90	34.70	22.22	0.056
	50	27.78	34.74	4.69	0.34	22.29	20	27.85	34.72	22.25	0.112
	100	26.30	35.21	4.05	0.72	23.12	30	27.82	34.72	22.26	0.168
	198	11.14	34.65	0.85	2.43	26.50	50	27.78	34.74	22.29	0.280
	294	9.04	34.65	1.70	2.51	26.86	75	27.40	35.14	22.72	0.414
	389	8.46	34.63	1.73	2.51	26.93	100	26.30	35.21	23.12	0.539
	581	7.22	34.58	1.30	2.87	27.08	150	18.19	34.77	25.07	0.733
	772	5.74	34.52	1.38	3.07	27.23	200	11.02	34.65	26.52	0.846
	965	4.51	34.54	1.54	3.10	27.39	250	9.80	34.66	26.74	0.919
	1160	3.81	34.56	1.79	3.07	27.48	300	9.01	34.65	26.86	0.984
							400	8.42	34.62	26.93	1.108
	1469	3.08	34.56	2.03	3.00	27.55	500	7.73	34.61	27.03	1.224
	1955	2.37	34.61	2.36	2.81	27.65	600	7.08	34.57	27.09	1.334
	2441	1.90	34.65	2.72	2.52	27.72	700	6.30	34.53	27.16	1.438
	2926	1.69	34.65	3.05	2.55	27.74	800	5.57	34.52	27.25	1.535
	3413	1.56	34.61	3.18	2.58	27.71	1000	4.35	34.55	27.41	1.706

OBSERVED					COMPUTED	INTERPOLATED				COMPUTED
Z	T	S	O_2	PO_4-P	σ_t	Z	T	S	σ_t	ΔD
m	°C	‰	ml/L	µg at/L	g/L	m	°C	‰	g/L	dyn. m
HUGH M. SMITH; July 9, 1950; 0324 GCT; 04°00'N, 172°03'W; wind, 020°, force 3; weather, partly cloudy; sea, smooth; wire angle, 0°.										18
0	27.90	35.07	4.71	0.49	22.50	0	27.90	35.07	22.50	0.000
10	27.98	35.05	4.69	0.44	22.46	10	27.98	35.05	22.46	0.054
50	27.78	35.12	4.71	0.44	22.58	20	27.93	35.08	22.50	0.108
99	27.62	35.16	4.58	0.48	22.66	30	27.85	35.10	22.54	0.161
197	12.09	34.65	1.45	1.94	26.32	50	27.78	35.12	22.58	0.267
294	9.42	34.67	2.06	2.14	26.81	75	27.70	35.14	22.62	0.399
390	8.34	34.61	2.04	2.26	26.93	100	27.62	35.16	22.66	0.531
583	6.66	34.58	1.22	2.75	27.16	150	20.40	34.89	24.59	0.747
775	5.38	34.52	1.71	2.74	27.27	200	11.80	34.68	26.40	0.874
968	4.55	34.54	1.95	2.75	27.38	250	9.98	34.71	26.75	0.950
1161	3.87	34.56	2.02	2.76	27.47	300	9.35	34.66	26.82	1.017
1452	3.04	34.58	2.09	2.87	27.57	400	8.20	34.61	26.96	1.141
						500	7.30	34.60	27.08	1.254
						600	6.54	34.57	27.16	1.357
						700	5.82	34.54	27.23	1.454
						800	5.25	34.52	27.29	1.545
						1000	4.40	34.54	27.40	1.713
HUGH M. SMITH; July 9, 1950; 1056 GCT; 03°00'N, 172°01'W; wind, 070°, force 4; weather, partly cloudy; sea, smooth; wire angle, 32°.										19
0	27.70	a)	4.61	0.42		0	27.70			
9	27.82		4.60	0.46		10	27.81			
42	27.79		4.61	0.42		20	27.80			
83	27.59		4.52	0.48		30	27.80			
164	19.30		3.24	0.97		50	27.75			
247	10.29		2.46	2.02		75	27.63			
330	9.54		2.30	2.15		100	26.90			
504	7.58		1.62	2.63		150	22.70			
681	5.94		1.46	2.98		200	11.10			
861	4.89		1.77	2.96		250	10.28			
1044	4.24		1.93	2.88		300	9.86			
1326	3.28		2.13	2.87		400	8.75			
						500	7.64			
						600	6.65			
						700	5.80			
						800	5.24			
						1000	4.42			
HUGH M. SMITH; July 9, 1950; 1903 GCT; 02°00'N, 171°53'W; wind, 140°, force 4; weather, partly cloudy; sea, smooth; wire angle, 42°.										20
0	27.40	35.08	4.71	0.42	22.67	0	27.40	35.08	22.67	0.000
8	27.70	35.05	4.69	0.36	22.55	10	27.68	35.05	22.56	0.053
36	27.60	35.10	4.68	0.40	22.62	20	27.63	35.06	22.58	0.105
72	27.26	35.32	4.72	0.52	22.90	30	27.62	35.08	22.60	0.158
146	22.79	35.05	3.40	0.82	24.06	50	27.48	35.18	22.72	0.262
221	11.60	34.85	2.89	1.67	26.56	75	27.25	35.32	22.90	0.390
300	10.56	34.79	1.80	2.03	26.71	100	27.00	35.36	23.01	0.514
464	7.77	34.61	1.97	2.35	27.02	150	21.50	34.98	24.36	0.728
640	6.46	34.56	1.84	2.57	27.17	200	12.27	34.87	26.45	0.860
822	4.98	34.54	2.14	2.59	27.34	250	11.20	34.82	26.62	0.939
1009	4.39	34.56	2.15	2.47	27.42	300	10.56	34.79	26.71	1.011
1294	3.54	34.56	2.35	2.49	27.50	400	8.78	34.66	26.91	1.144
						500	7.45	34.60	27.06	1.261
						600	6.76	34.57	27.13	1.368
						700	5.95	34.55	27.22	1.467
						800	5.12	34.54	27.32	1.558
						1000	4.40	34.56	27.42	1.723

a) Values available, but no bottle numbers.

POFI

HMS-5

OBSERVED					COMPUTED	INTERPOLATED				COMPUTED
Z	T	S	O_2	PO_4-P	σ_t	Z	T	S	σ_t	ΔD
m	°C	‰	ml/L	µg at/L	g/L	m	°C	‰	g/L	dyn. m
21	HUGH M. SMITH; July 10, 1950; 0407 GCT; 00°54'N, 172°10'W; wind, 140°, force 4; weather, partly cloudy; sea, slight; wire angle, 28°.									
0	27.10	35.35	4.73	0.72	22.97	0	27.10	35.35	22.97	0.000
9	27.12	35.35	4.70	0.58	22.96	10	27.10	35.35	22.97	0.049
44	26.90	35.39	4.70	0.56	23.06	20	27.07	35.37	23.00	0.098
88	26.80	35.35	4.65	0.58	23.07	30	26.97	35.38	23.03	0.147
179	17.16	35.23	3.33	1.14	25.67	50	26.88	35.38	23.06	0.244
272	12.42	34.87	3.11	1.61	26.43	75	26.82	35.37	23.08	0.364
366	10.24	34.74	1.59	2.30	26.73	100	26.78	35.35	23.07	0.486
557	7.30	34.58	1.56	2.82	27.07	150	22.12	35.15	24.32	0.699
753	5.96	34.52	1.96	2.88	27.20	200	15.10	35.08	26.03	0.843
950	5.79a)	34.54a)	1.86	2.77	27.24	250	12.70	34.89	26.39	0.937
1150	4.34	34.56	2.04	2.98	27.42	300	11.78	34.83	26.52	1.021
1450	3.61	34.56	2.11	2.87	27.50	400	9.61	34.70	26.80	1.168
						500	8.00	34.62	27.00	1.294
						600	6.98	34.57	27.10	1.406
						700	6.27	34.54	27.18	1.509
						800	5.63	34.52	27.24	1.607
						1000	4.75	34.55	27.37	1.784
22	HUGH M. SMITH; July 10, 1950; 1201 GCT; 00°08'S, 172°01'W; wind, 160°, force 4; weather, cloudy; sea, slight; wire angle, 28°.									
0	26.80	35.37	4.75	0.47	23.08	0	26.80	35.37	23.08	0.000
9	26.87	35.37	4.69	0.54	23.06	10	26.86	35.37	23.06	0.048
44	26.64	35.37	4.65	0.52	23.13	20	26.84	35.37	23.07	0.096
88	26.21	35.41	4.48	0.58	23.29	30	26.79	35.37	23.08	0.144
178	19.10	35.34	3.18	0.96	25.27	50	26.61	35.38	23.15	0.240
272	12.63	34.90	3.17	1.43	26.41	75	26.36	35.41	23.25	0.358
367	10.54	34.74	1.75	2.06	26.67	100	26.13	35.41	23.32	0.474
561	7.35	34.52	1.81	2.35	27.01	150	22.12	35.18	24.34	0.680
756	6.06	34.51	1.84	2.54	27.18	200	16.60	35.19	25.77	0.829
951	4.82	34.49	2.08	2.51	27.32	250	13.60	34.96	26.26	0.932
951	-	-	-	2.76	-	300	12.01	34.85	26.49	1.019
1148	4.00	34.51	2.24	2.40	27.42	400	9.90	34.69	26.75	1.169
1430	3.08	34.58	2.24	2.46	27.56	500	8.17	34.55	26.92	1.301
						600	7.02	34.52	27.06	1.418
						700	6.40	34.52	27.14	1.525
						800	5.79	34.50	27.21	1.625
						1000	4.64	34.50	27.34	1.807
23	HUGH M. SMITH; July 10, 1950; 1950 GCT; 01°00'S, 171°57'W; wind, 120°, force 4; weather, partly cloudy; sea, slight; wire angle, 31°.									
0	26.70	35.43	4.69	0.59	23.16	0	26.70	35.43	23.16	0.000
9	26.62	35.39	4.66	0.56	23.15	10	26.62	35.39	23.15	0.047
42	26.62	35.39	4.68	0.56	23.15	20	26.62	35.39	23.15	0.095
86	26.50	35.43	4.63	0.59	23.22	30	26.62	35.39	23.15	0.142
173	22.50	35.77	3.30	0.92	24.68	50	26.61	35.40	23.16	0.237
262	12.72	34.97	3.15	1.52	26.44	75	26.55	35.41	23.19	0.355
353	10.66	34.76	2.14	2.02	26.67	100	26.47	35.44	23.24	0.473
540	7.30	34.58	1.80	2.57	27.07	150	25.30	35.63	23.75	0.695
731	6.08	34.52	1.93	2.77	27.19	200	16.80	35.34	25.84	0.857
924	4.80	34.54	2.12	2.83	27.36	250	13.19	35.01	26.38	0.956
1118	4.13	34.58	2.24	2.81	27.46	300	11.80	34.87	26.55	1.038
1409	3.18	34.61	2.24	2.77	27.58	400	9.80	34.71	26.78	1.184
						500	7.90	34.61	27.00	1.310
						600	6.85	34.56	27.11	1.420
						700	6.24	34.53	27.17	1.523
						800	5.60	34.52	27.25	1.520
						1000	4.47	34.56	27.41	1.791

a) Value appears improbable on Temperature-Depth and Temperature-Salinity curves; bottom three bottles may have pretripped.

OBSERVED					COMPUTED	INTERPOLATED				COMPUTED
Z	T	S	O_2	PO_4-P	σ_t	Z	T	S	σ_t	ΔD
m	°C	‰	ml/L	μg at/L	g/L	m	°C	‰	g/L	dyn. m
HUGH M. SMITH; July 11, 1950; 0200 GCT; 02°02'S, 171°57'W; wind, 100°, force 3; weather, partly cloudy; sea, smooth; wire angle, 40°.										24
0	27.30	35.48	4.79	0.91	23.00	0	27.30	35.48	23.00	0.000
8	27.12	35.50	4.78	0.98	23.07	10	27.11	35.49	23.07	0.048
37	26.82	35.44	4.81	0.94	23.13	20	26.99	35.48	23.10	0.096
73	26.74	35.41	4.80	0.83	23.13	30	26.88	35.46	23.12	0.144
144	26.66	35.55	4.46	0.97	23.26	50	26.80	35.42	23.12	0.240
216	14.36	35.14	2.61	1.83	26.24	75	26.73	35.42	23.14	0.359
290	11.12	34.83	2.95	2.08	26.64	100	26.72	35.48	23.19	0.478
450	8.34	34.63	2.26	2.43	26.95	150	26.60	35.57	23.30	0.712
620	6.38	34.54	1.84	2.89	27.16	200	16.90	35.38	25.85	0.884
796	5.00	34.49	2.31	2.69	27.30	250	12.07	34.92	26.53	0.979
979	4.46	34.56	2.19	2.41	27.41	300	10.95	34.82	26.66	1.055
1266	3.56	34.56	2.24	2.82	27.50	400	9.12	34.69	26.88	1.191
						500	7.63	34.56	27.00	1.312
						600	6.57	34.51	27.11	1.421
						700	5.63	34.48	27.21	1.522
						800	4.99	34.49	27.29	1.613
						1000	4.40	34.57	27.42	1.778
HUGH M. SMITH; July 11, 1950; 1150 GCT; 02°59'S, 171°59'W; wind, 110°, force 4; weather, partly cloudy; sea, slight; wire angle, 20°.										25
0	26.70	35.50	4.64	0.64	23.21	0	26.70	35.50	23.21	0.000
9	27.03	35.48	4.64	0.62	23.09	10	27.03	35.48	23.09	0.047
46	27.00	35.48	4.69	0.58	23.10	20	27.02	35.48	23.09	0.095
92	26.94	35.48	4.67	0.60	23.12	30	27.02	35.48	23.09	0.143
182	24.08	35.97	3.65	0.82	24.37	50	27.00	35.48	23.10	0.239
271	10.94	34.83	2.12	2.06	26.67	75	26.96	35.48	23.11	0.359
361	9.40	34.69	2.09	2.25	26.83	100	26.92	35.48	23.13	0.479
544	7.30	34.58	1.76	2.61	27.07	150	26.80	35.51	23.19	0.718
729	5.56	34.51	2.32	2.79	27.24	200	19.95	35.71	25.33	0.905
915	4.68	34.51	2.37	2.91	27.35	250	12.00	34.93	26.55	1.012
1102	4.02	34.54	2.34	2.92	27.44	300	10.35	34.78	26.74	1.085
1385	3.26	34.69	2.35	2.36	27.63	400	8.92	34.67	26.89	1.216
						500	7.76	34.60	27.02	1.335
						600	6.78	34.54	27.11	1.445
						700	5.78	34.51	27.21	1.546
						800	5.12	34.51	27.29	1.637
						1000	4.40	34.52	27.38	1.805
HUGH M. SMITH; July 11, 1950; 2117 GCT; 04°05'S, 171°56'W; wind, missing; weather, partly cloudy; sea, slight; wire angle, 15°.										26
0	27.60	35.79	4.69	0.56	23.14	0	27.60	35.79	23.14	0.000
9	27.61	35.71	4.64	0.51	23.07	10	27.61	35.71	23.08	0.048
48	27.60	35.71	4.68	0.56	23.08	20	27.60	35.71	23.08	0.096
95	27.58	35.71	4.67	0.56	23.08	30	27.60	35.71	23.08	0.144
189	23.03	36.09	3.63	0.80	24.77	50	27.60	35.71	23.08	0.240
281	11.66	34.88	2.08	1.88	26.58	75	27.59	35.71	23.08	0.361
371	9.50	34.70	1.87	2.27	26.82	100	27.57	35.72	23.10	0.481
553	7.20	34.58	1.58	2.53	27.08	150	26.55	35.81	23.49	0.714
736	5.46	34.54	2.17	2.72	27.28	200	22.00	35.99	24.99	0.902
918	4.50	34.54	2.27	2.67	27.39	250	12.98	35.01	26.42	1.020
1104	3.92	34.54	2.35	2.59	27.45	300	11.10	34.84	26.65	1.099
1394	3.18	34.60	2.32	2.66	27.57	400	9.07	34.68	26.88	1.235
						500	7.80	34.61	27.02	1.355
						600	6.70	34.56	27.13	1.463
						700	5.78	34.56	27.25	1.561
						800	5.04	34.54	27.33	1.649
						1000	4.21	34.54	27.42	1.810

POFI

HMS-5

	OBSERVED					COMPUTED	INTERPOLATED				COMPUTED
	Z	T	S	O_2	PO_4-P	σ_t	Z	T	S	σ_t	ΔD
	m	°C	‰	ml/L	µg at/L	g/L	m	°C	‰	g/L	dyn. m
27	HUGH M. SMITH; July 12, 1950; 0522, 0636 GCT; 05°04'S, 171°58'W; wind, 100°, force 3; weather, partly cloudy; sea, slight; wire angle, 30°, 40°.										
	0	27.90	35.79	4.68	a)	23.04	0	27.90	35.79	23.04	0.000
	9	27.86	35.70	4.64		22.99	10	27.85	35.69	22.98	0.049
	43	27.68	35.68	4.69		23.03	20	27.80	35.69	23.00	0.098
	85	27.66	35.70	4.67		23.05	30	27.75	35.68	23.01	0.146
	168	24.98	35.97	3.90		24.10	50	27.68	35.70	23.05	0.244
	247	15.10	35.19	2.36		26.12	75	27.67	35.70	23.05	0.365
	324	10.42	34.78	2.03		26.73	100	27.62	35.71	23.07	0.486
	480	8.14	34.63	1.73		26.98	150	25.66	35.90	23.84	0.711
	639	6.60	34.54	2.15		27.13	200	20.45	35.80	25.27	0.884
	806	5.29	34.51	2.52		27.28	250	14.90	35.18	26.15	1.002
	986	4.46	34.54	2.51		27.39	300	11.60	34.87	26.58	1.089
							400	9.08	34.68	26.87	1.229
	1162	3.87	35.21b)	3.30		27.99	500	7.96	34.61	26.99	1.350
	1611u	2.76	34.61	2.76		27.62	600	6.99	34.56	27.09	1.462
	2072	2.14	34.63	2.98		27.68	700	6.07	34.53	27.19	1.564
	2537	1.81	34.63	3.16		27.71	800	5.35	34.52	27.28	1.658
	3480	1.49	34.67	3.69		27.77	1000	4.40	34.54	27.40	1.827
28	HUGH M. SMITH; July 28, 1950; 1349, 1449 GCT; 04°59'S, 158°03'W; wind, 110°, force 4; weather, cloudy; sea, moderate; wire angle, 35°, 35°.										
	0	26.60	35.68	4.67	a)	23.38	0	26.60	35.68	23.38	0.000
	8	26.64	35.55	4.63		23.27	10	26.63	35.55	23.27	0.046
	41	26.67	35.55	4.71		23.26	20	26.64	35.55	23.27	0.092
	82	26.68	35.53	4.67		23.24	30	26.65	35.55	23.26	0.138
	155	21.76	36.06	3.73		25.11	50	26.67	35.54	23.25	0.231
	226	13.14	34.99	1.87		26.38	75	26.68	35.54	23.25	0.348
	300	10.82	34.81	2.00		26.68	100	26.69	35.53	23.24	0.465
	456	8.02	34.58	1.93		26.96	150	22.45	36.12	24.96	0.658
	622	6.76	34.54	2.00		27.11	200	17.30	35.36	25.74	0.793
	798	5.52	34.51	1.99		27.25	250	12.05	34.92	26.54	0.891
	985	4.22	34.54	2.28		27.42	300	10.82	34.81	26.68	0.966
							400	8.85	34.64	26.88	1.101
	1274	3.36	34.65	2.63		27.59	500	7.66	34.56	27.00	1.221
	1756	2.46	34.63	2.74		27.66	600	6.90	34.55	27.10	1.332
	2237	2.05	34.65	2.93		27.71	700	6.21	34.52	27.17	1.436
	2718	1.80	34.67	3.18		27.74	800	5.50	34.51	27.25	1.532
							1000	4.16	34.54	27.43	1.701
29	HUGH M. SMITH; July 29, 1950; 2350 GCT; 04°00'S, 158°03'W; wind, 110°, force 5; weather, cloudy; sea, moderate; wire angle, 35°.										
	0	26.20	35.48	4.81	a)	23.35	0	26.20	35.48	23.35	0.000
	9	26.51	35.46	4.63		23.24	10	26.50	35.46	23.24	0.046
	40	26.44	35.44	4.70		23.25	20	26.46	35.45	23.25	0.092
	80	26.42	35.46	4.71		23.27	30	26.45	35.44	23.24	0.139
	158	23.86	36.08	3.83		24.52	50	26.43	35.44	23.25	0.232
	235	13.15	34.99	1.46		26.37	75	26.42	35.45	23.26	0.348
	312	10.31	34.81	1.25		26.77	100	26.41	35.46	23.27	0.465
	466	8.12	34.65	2.05		27.00	150	24.35	36.01	24.32	0.674
	621	6.54	34.56	1.76		27.16	200	18.75	35.56	25.53	0.830
	778	5.48	35.54	1.93		27.28	250	11.81	34.90	26.57	0.933
	940	4.67	34.54	2.07		27.37	300	10.52	34.83	26.75	1.006
	1205	3.78	34.58	2.23		27.49	400	8.98	34.71	26.91	1.137
							500	7.71	34.63	27.05	1.254
							600	6.70	34.57	27.14	1.361
							700	5.92	34.54	27.22	1.460
							800	5.33	34.54	27.29	1.553
							1000	4.48	34.55	27.40	1.722

a) Photometer not operating properly.

b) Nansen bottle may have leaked on the way up.

HUGH M. SMITH; July 29, 1950; 0805 GCT; 03°03'S, 158°00'W; wind, 100°, force 5; weather, cloudy; sea, moderate; wire angle, 40°. 30

OBSERVED					COMPUTED	INTERPOLATED				COMPUTED
Z	T	S	O_2	PO_4-P	σ_t	Z	T	S	σ_t	ΔD
m	°C	‰	ml/L	µg at/L	g/L	m	°C	‰	g/L	dyn. m
0	26.30	35.48	4.75	a)	23.32	0	26.30	35.48	23.32	0.000
9	26.48	35.48	4.68		23.27	10	26.48	35.48	23.27	0.046
38	26.50	35.48	4.70		23.26	20	26.48	35.48	23.27	0.092
73	26.45	35.48	4.71		23.27	30	26.50	35.48	23.26	0.139
146	21.90	35.93	3.63		24.97	50	26.48	35.48	23.27	0.231
218	12.34	34.94	1.99		26.49	75	26.44	35.49	23.29	0.347
290	10.08	34.74	2.12		26.75	100	26.43	35.49	23.29	0.463
437	8.64	34.65	1.82		26.92	150	21.75	35.91	25.00	0.655
592	7.10	34.60	1.33		27.11	200	13.65	35.03	26.30	0.775
757	5.70	34.52	1.92		27.23	250	11.28	34.84	26.62	0.857
930	4.86	34.51	2.06		27.32	300	9.92	34.73	26.77	0.928
1210	3.73	34.58	2.34		27.50	400	8.93	34.67	26.89	1.057
						500	8.04	34.63	27.00	1.178
						600	7.02	34.59	27.11	1.288
						700	6.12	34.54	27.20	1.390
						800	5.42	34.52	27.27	1.484
						1000	4.69	34.52	27.35	1.659

HUGH M. SMITH; July 29, 1950; 1617 GCT; 02°03'S, 158°00'W; wind, 080°, force 5; weather, cloudy; sea, moderate; wire angle, 20°. 31

0	26.40	35.53	4.65	a)	23.33	0	26.40	35.53	23.33	0.000
10	26.50	35.48	4.58		23.26	10	26.50	35.48	23.26	0.046
47	26.52	35.48	4.64		23.25	20	26.50	35.48	23.26	0.092
93	26.48	35.46	4.65		23.25	30	26.50	35.48	23.26	0.139
183	13.57	35.07	2.29		26.35	50	26.50	35.48	23.26	0.232
273	10.45	34.76	2.04		26.71	75	26.49	35.47	23.25	0.348
362	9.88	34.72	1.75		26.77	100	26.46	35.46	23.26	0.464
544	7.04	34.58	1.79		27.10	150	23.35	35.98	24.59	0.667
730	6.05	34.52	1.88		27.19	200	12.08	34.93	26.54	0.791
919	4.88	34.51	2.14		27.32	250	10.63	34.78	26.69	0.865
1109	4.33	34.54	2.25		27.41	300	10.23	34.75	26.74	0.935
1400	3.34	34.56	2.44		27.52	400	9.42	34.69	26.83	1.070
						500	7.68	34.61	27.04	1.191
						600	6.70	34.56	27.13	1.299
						700	6.18	34.53	27.18	1.400
						800	5.67	34.51	27.23	1.497
						1000	4.65	34.52	27.36	1.676

HUGH M. SMITH; July 30, 1950; 0047 GCT; 01°00'S, 158°01'W; wind, 090°, force 6; weather, partly cloudy; sea, rough; wire angle, 32°. 32

0	26.30	35.48	4.70	a)	23.32	0	26.30	35.48	23.32	0.000
8	26.35	35.46	4.62		23.29	10	26.32	35.46	23.30	0.046
42	26.30	35.48	4.66		23.32	20	26.31	35.47	23.31	0.092
84	26.04	35.46	4.54		23.39	30	26.30	35.48	23.32	0.137
169	16.20	35.32	2.68		25.96	50	26.28	35.48	23.33	0.229
259	12.18	34.88	2.94		26.48	75	26.13	35.47	23.37	0.343
351	10.71	34.79	1.73		26.68	100	25.10	35.47	23.69	0.453
539	7.54	34.58	1.55		27.03	150	18.43	35.47	25.54	0.622
728	6.24	34.52	1.70		27.16	200	13.56	35.01	26.30	0.729
919	5.00	34.52	2.04		27.32	250	12.31	34.90	26.47	0.815
1111	4.20	34.54	2.05		27.42	300	11.57	34.84	26.57	0.894
1402	3.24	34.58	2.13		27.55	400	9.81	34.74	26.80	1.039
						500	8.12	34.62	26.98	1.165
						600	6.99	34.54	27.08	1.278
						700	6.39	34.52	27.14	1.384
						800	5.80	34.52	27.22	1.483
						1000	4.71	34.53	27.36	1.663

a) Photometer not operating properly.

POFI

HMS-5

	OBSERVED					COMPUTED	INTERPOLATED				COMPUTED
	Z	T	S	O_2	PO_4-P	σ_t	Z	T	S	σ_t	ΔD
	m	°C	‰	ml/L	µg at/L	g/L	m	°C	‰	g/L	dyn. m
33	HUGH M. SMITH; July 30, 1950; 0850 GCT; 00°02'S, 157°58'W; wind, 100°, force 5; weather, cloudy; sea, moderate; wire angle, 41°.										
	0	25.70	35.39	4.64	a)	23.44	0	25.70	35.39	23.44	0.000
	8	25.84	35.37	4.58		23.38	10	25.84	35.37	23.38	0.045
	38	25.84	35.37	4.58		23.38	20	25.83	35.37	23.39	0.090
	76	25.70	35.37	4.48		23.43	30	25.84	35.37	23.38	0.135
	153	18.93	35.30	3.28		25.28	50	25.81	35.37	23.39	0.226
	237	12.81	34.92	3.12		26.39	75	25.70	35.37	23.43	0.338
	329	11.22	34.83	2.10		26.62	100	25.42	35.35	23.50	0.450
	518	7.72	34.61	1.57		27.03	150	19.00	35.29	25.26	0.630
	708	6.18	34.56	1.74		27.20	200	15.05	35.10	26.06	0.750
	897	5.25	34.52	1.99		27.29	250	12.50	34.90	26.43	0.842
	1088	4.16	34.54	2.04		27.43	300	11.62	34.86	26.57	0.923
	1378	3.20	34.63	2.11		27.59	400	9.87	34.73	26.78	1.068
							500	8.00	34.62	27.00	1.194
							600	6.95	34.58	27.12	1.304
							700	6.21	34.56	27.20	1.405
							800	5.70	34.53	27.24	1.501
							1000	4.65	34.52	27.36	1.679
34	HUGH M. SMITH; July 30, 1950; 1715 GCT; 00°57'N, 157°57'W; wind, 100°, force 5; weather, partly cloudy; sea, moderate; wire angle, 45°.										
	0	25.50	35.21	4.56	a)	23.37	0	25.50	35.21	23.37	0.000
	7	25.74	35.19	4.50		23.28	10	25.74	35.19	23.28	0.046
	34	25.75	35.17	4.52		23.26	20	25.74	35.18	23.27	0.092
	68	25.69	35.17	4.48		23.28	30	25.74	35.18	23.27	0.138
	137	20.12	34.90	3.22		24.67	50	25.70	35.17	23.28	0.231
	215	13.12	34.96	3.13		26.36	75	25.62	35.17	23.30	0.346
	299	10.85	34.83	2.01		26.69	100	25.25	35.15	23.40	0.461
	476	8.46	34.69	1.28		26.98	150	18.30	34.88	25.12	0.646
	659	6.38	34.58	1.63		27.19	200	13.46	34.97	26.29	0.764
	844	5.45	34.54	1.92		27.28	250	12.15	34.91	26.51	0.848
	1030	4.42	34.56	2.03		27.41	300	10.83	34.83	26.69	0.924
	1316	3.38	34.58	2.01		27.53	400	9.32	34.74	26.88	1.058
							500	8.15	34.68	27.02	1.178
							600	6.96	34.62	27.15	1.286
							700	6.09	34.56	27.21	1.385
							800	5.62	34.54	27.26	1.479
							1000	4.55	34.56	27.40	1.651
35	HUGH M. SMITH; July 31, 1950; 0158 GCT; 02°00'N, 158°07'W; wind, 110°, force 5; weather, cloudy; sea, moderate; wire angle, 37°.										
	0	26.30	35.28	4.67	0.72	23.17	0	26.30	35.28	23.17	0.000
	7	26.42	35.23	4.58	0.69	23.10	10	26.39	35.22	23.10	0.047
	37	26.21	35.21	4.56	0.69	23.15	20	26.32	35.21	23.11	0.095
	73	26.09	35.23	4.51	0.76	23.20	30	26.26	35.21	23.13	0.143
	147b)	20.14	34.92	3.20	1.19	24.68	50	26.18	35.22	23.16	0.238
	221	11.24	34.85	2.47	2.05	26.63	75	26.05	35.23	23.21	0.356
	293	10.62	34.81	1.84	2.22	26.71	100	25.81	35.22	23.28	0.473
	293	–	–	–	2.46	–	150	18.25	34.86	25.12	0.661
	443	9.06	34.70	1.31	2.72	26.89	200	11.88	34.87	26.53	0.773
	443	–	–	–	2.98	–	250	11.00	34.83	26.66	0.848
	595	6.96	34.61	1.56	2.98	27.14	300	10.55	34.80	26.72	0.919
	749	6.12	34.58	1.78	3.08	27.23	400	9.55	34.73	26.84	1.055
	904	5.12	34.58	1.99	2.98	27.35	500	8.25	34.66	26.99	1.178
	1144	4.10	34.60	2.09	3.07	27.48	600	6.91	34.60	27.14	1.288
							700	6.34	34.59	27.21	1.388
							800	5.82	34.58	27.27	1.483
							1000	4.50	34.58	27.42	1.652

a) Photometer not operating properly.

b) Nansen bottle may have pretripped.

OBSERVED					COMPUTED	INTERPOLATED				COMPUTED
Z	T	S	O_2	PO_4-P	σ_t	Z	T	S	σ_t	ΔD
m	°C	‰	ml/L	µg at/L	g/L	m	°C	‰	g/L	dyn. m
HUGH M. SMITH; July 31, 1950; 0932 GCT; 03°00'N, 157°58'W; wind, 100°, force 5; weather, partly cloudy; sea, moderate; wire angle, 42°.										36
0	26.10	35.30	4.77	0.68	23.25	0	26.10	35.30	23.25	0.000
7	26.30	35.25	4.75	0.66	23.15	10	26.29	35.25	23.15	0.047
38	26.22	35.25	4.75	0.68	23.17	20	26.27	35.25	23.16	0.094
73	26.01	35.23	4.72	0.69	23.22	30	26.23	35.25	23.17	0.142
140	23.83	35.16	3.85	0.82	23.83	50	26.14	35.24	23.19	0.236
200	10.88	34.74	2.69	1.89	26.61	75	26.00	35.23	23.23	0.353
262	10.43	34.78	1.78	2.18	26.73	100	25.92	35.22	23.25	0.471
400	9.53	34.69	1.62	2.28	26.81	150	23.62	35.09	23.84	0.692
542	7.98	34.60	1.27	2.64	26.98	200	10.88	34.74	26.61	0.833
690	6.40	34.52	1.60	2.69	27.14	250	10.43	34.78	26.73	0.905
849	5.30	34.54	1.78	2.90	27.30	300	10.31	34.78	26.75	0.974
1114	4.00	34.56	1.86	2.87	27.46	400	9.53	34.69	26.81	1.110
						500	8.44	34.63	26.93	1.238
						600	7.31	34.56	27.05	1.356
						700	6.30	34.52	27.16	1.463
						800	5.60	34.53	27.25	1.561
						1000	4.41	34.56	27.41	1.733
HUGH M. SMITH; July 31, 1950; 1712 GCT; 04°02'N, 158°03'W; wind, 090°, force 4; weather, partly cloudy; sea, moderate; wire angle, 40°.										37
0	25.90	35.25	4.70	0.76	23.27	0	25.90	35.25	23.27	0.000
7	26.00	35.19	4.61	0.72	23.20	10	26.00	35.20	23.21	0.046
36	26.00	35.21	4.65	0.74	23.21	20	26.00	35.20	23.21	0.093
71	25.94	35.21	4.60	0.85	23.23	30	26.00	35.20	23.21	0.140
135	25.38	35.25	4.37	1.01	23.43	50	25.99	35.21	23.22	0.234
195	11.04	34.63	1.85	2.21	26.50	75	25.90	35.21	23.24	0.351
257	9.70	34.67	2.19	2.38	26.76	100	25.71	35.24	23.33	0.467
386	8.94	34.65	1.58	2.72	26.87	150	25.23	35.25	23.48	0.694
522	7.96	34.63	1.48	2.94	27.01	200	10.57	34.68	26.62	0.842
659	6.49	34.56	1.20	3.32	27.16	250	9.72	34.67	26.76	0.913
800	5.42	34.54	1.65	3.24	27.28	300	9.50	34.66	26.79	0.980
1042	4.40	34.54	1.84	3.28	27.40	400	8.86	34.65	26.89	1.109
						500	8.11	34.64	27.00	1.229
						600	7.07	34.59	27.11	1.340
						700	6.14	34.55	27.20	1.442
						800	5.42	34.54	27.28	1.535
						1000	4.50	34.54	27.39	1.705
HUGH M. SMITH; August 1, 1950; 0023, 0135, 0333 GCT; 05°00'N, 158°00'W; wind, 130°, force 4; weather, cloudy; sea, slight; wire angle, 25°, 32°, 35°.										38
0	27.20	35.23	4.69	0.53	22.85	0	27.20	35.23	22.85	0.000
8	27.30	35.14	4.68	0.48	22.75	10	27.29	35.14	22.75	0.051
46	27.12	35.14	4.70	0.49	22.81	20	27.24	35.14	22.77	0.102
85	26.30	35.16	4.63	0.64	23.08	30	27.19	35.14	22.78	0.153
169	20.75	34.90	3.44	0.82	24.50	50	27.11	35.14	22.79	0.254
253	10.08	34.70	0.86	2.41	26.72	75	26.85	35.15	22.90	0.381
336	9.04	34.65	1.95	2.41	26.86	100	25.95	35.17	23.20	0.502
507	7.92	34.61	1.35	2.73	27.00	150	23.05	35.05	23.98	0.721
681	6.49	34.56	1.06	2.85	27.16	200	16.00	34.70	25.54	0.885
861	5.20	34.54	1.10	3.05	27.31	250	10.10	34.70	26.72	0.983
1050	4.37	34.54	1.38	2.94	27.40	300	9.38	34.67	26.82	1.051
						400	8.60	34.63	26.91	1.178
1244	3.70	34.56	1.69	2.84	27.49	500	7.96	34.61	26.99	1.297
						600	7.15	34.58	27.09	1.410
1788	2.50	34.60	2.07	2.82	27.63	700	6.31	34.56	27.19	1.514
2271	2.00	34.65	2.85	2.68	27.71	800	5.58	34.54	27.26	1.610
2752	1.82	34.65	2.80	2.55	27.73	1000	4.51	34.54	27.39	1.784
3715	1.44	34.65	3.61	2.27	27.75					

	OBSERVED					COMPUTED	INTERPOLATED				COMPUTED
	Z	T	S	O_2	PO_4-P	σ_t	Z	T	S	σ_t	ΔD
	m	°C	‰	ml/L	μg at/L	g/L	m	°C	‰	g/L	dyn. m
39	HUGH M. SMITH; August 1, 1950; 1213 GCT; 06°00'N, 157°57'W; wind, 120°, force 4; weather, cloudy; sea, slight; wire angle, 32°.										
	0	27.30	34.88	4.66	0.62	22.55	0	27.30	34.88	22.55	0.000
	8	27.44	34.83	4.71	0.51	22.47	10	27.44	34.83	22.47	0.053
	42	27.44	34.83	4.64	0.48	22.47	20	27.44	34.83	22.47	0.107
	81	26.55	34.94	4.29	0.62	22.84	30	27.44	34.83	22.47	0.161
	158	17.40	34.72	3.29	1.17	25.22	50	27.44	34.83	22.47	0.269
	233	11.54	34.67	1.15	2.39	26.44	75	26.72	34.92	22.77	0.401
	209	9.90	34.67	0.59	2.70	26.73	100	25.50	35.06	23.25	0.523
	466	8.36	34.61	0.95	2.90	26.93	150	19.75	34.80	24.69	0.723
	628	7.12	34.54	0.78	3.17	27.06	200	13.05	34.65	26.13	0.854
	796	5.70	34.54	1.03	3.28	27.25	250	11.25	34.68	26.50	0.943
	973	4.48	34.54	1.45	3.28	27.39	300	10.07	34.68	26.71	1.018
	1258p	-	34.61	-	-	-	400	8.89	34.64	26.87	1.151
							500	8.07	34.59	26.96	1.274
							600	7.32	34.55	27.04	1.390
							700	6.50	34.53	27.14	1.498
							800	5.65	34.54	27.25	1.596
							1000	4.33	34.54	27.41	1.767
40	HUGH M. SMITH; August 1, 1950; 1927 GCT; 07°00'N, 157°57'W; wind, 100°, force 5; weather, partly cloudy; sea, slight; wire angle, 32°.										
	0	27.40	34.92	4.65	0.52	22.55	0	27.40	34.92	22.55	0.000
	9	27.49	34.90	4.63	0.46	22.51	10	27.49	34.90	22.51	0.053
	42	27.50	34.90	4.66	0.41	22.50	20	27.49	34.90	22.51	0.107
	84	27.46	34.94	4.63	0.48	22.55	30	27.49	34.90	22.51	0.160
	164	14.17	34.61	1.97	1.70	25.87	50	27.50	34.90	22.50	0.268
	242	10.53	34.72	0.63	2.34	26.66	75	27.49	34.91	22.51	0.402
	320	9.55	34.69	0.72	2.57	26.80	100	27.38	34.94	22.57	0.536
	479	8.18	34.61	0.95	2.74	26.96	150	15.65	34.63	25.56	0.731
	640	6.69	34.54	0.50	3.13	27.12	200	11.40	34.67	26.46	0.833
	802	5.34	34.52	0.78	3.06	27.28	250	10.45	34.73	26.68	0.909
	971	4.64	34.54	1.35	3.09	27.37	300	9.79	34.71	26.78	0.978
	1245	3.64	34.56	1.60	3.17	27.49	400	8.88	34.65	26.88	1.108
							500	7.98	34.60	26.98	1.229
							600	7.05	34.55	27.08	1.342
							700	6.11	34.52	27.18	1.446
							800	5.35	34.52	27.28	1.540
							1000	4.55	34.54	27.38	1.711
41	HUGH M. SMITH; August 2, 1950; 0250 GCT; 08°00'N, 157°49'W; wind, 120°, force 4; weather, partly cloudy; sea, slight; wire angle, 27°.										
	0	27.70	34.43	4.66	0.43	22.09	0	27.70	34.43	22.09	0.000
	9	27.78	34.34	4.58	0.37	22.00	10	27.77	34.35	22.00	0.058
	44	27.62	34.45	4.62	0.37	22.13	20	27.73	34.36	22.02	0.116
	87	22.18	34.79	4.14	0.68	24.03	30	27.68	34.37	22.05	0.174
	172	11.39	34.61	0.69	2.48	26.42	50	27.58	34.51	22.18	0.289
	258	9.98	34.69	0.53	2.73	26.73	75	26.05	34.93	22.99	0.421
	343	9.28	34.69	0.58	2.82	26.85	100	19.45	34.64	24.65	0.524
	518	7.53	34.58	0.54	3.18	27.03	150	12.75	34.49	26.07	0.658
	695	6.02	34.52	0.84	3.28	27.20	200	10.73	34.66	26.58	0.745
	871	5.01	34.56	0.85	3.40	27.35	250	10.04	34.68	26.71	0.818
	1051	4.26	-	1.30	3.26	-	300	9.63	34.69	26.79	0.886
	1327	3.42	34.56	1.48	3.23	27.51	400	8.68	34.65	26.92	1.013
							500	7.68	34.58	27.01	1.131
							600	6.83	34.54	27.10	1.241
							700	6.01	34.52	27.19	1.343
							800	5.40	34.54	27.29	1.437
							1000	4.52	34.56	27.40	1.605

OBSERVED					COMPUTED	INTERPOLATED				COMPUTED
Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg at/L	σ_t g/L	Z m	T °C	S ‰	σ_t g/L	ΔD dyn. m
HUGH M. SMITH; August 2, 1950; 1051 GCT; 09°00'N, 157°55'W; wind, 130°, force 4; weather, rain showers; sea, slight; wire angle, 10°.										42
0	27.00	34.31	4.67	0.41	22.22	0	27.00	34.31	22.22	0.000
9	27.15	34.23	4.65	0.38	22.11	10	27.15	34.23	22.11	0.057
49	26.88	34.36	4.72	0.37	22.30	20	27.10	34.25	22.14	0.114
97	14.22	34.33	3.03	1.16	25.64	30	27.02	34.27	22.18	0.171
194	10.29	34.63	0.44	2.39	26.63	50	26.83	34.36	22.31	0.283
290	9.45	34.61	0.47	2.44	26.76	75	22.50	34.68	23.85	0.403
385	8.38	34.56	0.66	2.64	26.89	100	13.85	34.32	25.71	0.483
574	6.58	34.51	0.56	2.87	27.11	150	10.98	34.53	26.43	0.582
765	5.40	34.52	0.73	2.99	27.27	200	10.19	34.63	26.65	0.659
955	4.42	34.52	1.01	2.87	27.38	250	9.78	34.62	26.71	0.730
1147	3.88	34.54	1.29	2.94	27.45	300	9.33	34.61	26.78	0.798
1440	3.22	34.52	1.26	2.92	27.50	400	8.22	34.56	26.92	0.926
						500	7.19	34.53	27.04	1.042
						600	6.38	34.52	27.15	1.148
						700	5.75	34.52	27.23	1.246
						800	5.20	34.52	27.29	1.338
						1000	4.20	34.53	27.41	1.503
HUGH M. SMITH; August 2, 1950; 1815 GCT; 10°00'N, 157°53'W; wind, 070°, force 3; weather, partly cloudy; sea, slight; wire angle, 27°.										43
0	26.90	34.13	4.96	0.43	22.12	0	26.90	34.13	22.12	0.000
9	27.03	34.13	4.58	0.39	22.08	10	27.03	34.13	22.08	0.057
44	26.48	34.54	4.71	0.40	22.56	20	27.03	34.13	22.08	0.115
87	23.51	34.58	4.75	0.48	23.49	30	27.00	34.14	22.09	0.173
173	11.34	34.49	0.78	2.57	26.33	50	26.45	34.55	22.57	0.283
258	10.08	34.63	–	–	26.67	75	25.71	34.58	22.83	0.413
343	9.10	34.63	0.63	2.83	26.83	100	20.25	34.62	24.43	0.521
517	7.46	34.54	0.65	3.11	27.01	150	12.22	34.36	26.07	0.659
694	5.86	34.49	0.79	3.28	27.19	200	10.84	34.57	26.49	0.748
872	4.82	34.52	1.11	3.34	27.34	250	10.15	34.63	26.66	0.825
1053	4.11	34.54	1.26	3.33	27.43	300	9.58	34.63	26.75	0.895
1331	3.26	34.58	1.70	3.45	27.55	400	8.55	34.60	26.90	1.025
						500	7.61	34.55	27.00	1.144
						600	6.68	34.51	27.10	1.255
						700	5.81	34.50	27.20	1.357
						800	5.20	34.51	27.29	1.449
						1000	4.34	34.54	27.41	1.616
HUGH M. SMITH; August 3, 1950; 0215 GCT; 11°00'N, 157°55'W; wind, 060°, force 4; weather, cloudy; sea, slight; wire angle, 40°.										44
0	27.10	34.70	4.69	0.36	22.48	0	27.10	34.70	22.48	0.000
9	27.20	34.60	4.70	0.32	22.37	10	27.17	34.60	22.38	0.054
38	26.58	34.70	4.76	0.34	22.65	20	26.88	34.67	22.53	0.108
74	25.84	34.67	4.81	0.36	22.85	30	26.69	34.70	22.61	0.161
145	13.54	34.29	2.26	1.64	25.75	50	26.42	34.70	22.70	0.266
212	10.52	34.54	0.76	2.33	26.52	75	25.83	34.68	22.87	0.393
279	9.90	34.67	0.35	2.46	26.73	100	21.32	34.82	24.29	0.502
412	8.61	34.60	0.57	2.51	26.88	150	13.05	34.28	25.84	0.649
546	7.11	34.49	0.26	2.92	27.02	200	10.89	34.45	26.39	0.747
680	5.90	34.45	0.52	3.08	27.15	250	10.08	34.64	26.68	0.825
819	5.07	34.52	0.51	3.08	27.31	300	9.72	34.66	26.75	0.894
1066	4.02	34.54	0.97	3.04	27.44	400	8.73	34.60	26.87	1.026
						500	7.68	34.53	26.97	1.148
						600	6.60	34.47	27.08	1.261
						700	5.76	34.46	27.18	1.365
						800	5.14	34.51	27.29	1.458
						1000	4.30	34.53	27.40	1.625

POFI

HMS-5

OBSERVED					COMPUTED	INTERPOLATED				COMPUTED
Z	T	S	O_2	PO_4-P	σ_t	Z	T	S	σ_t	ΔD
m	°C	‰	ml/L	µg at/L	g/L	m	°C	‰	g/L	dyn. m
45	HUGH M. SMITH; August 3, 1950; 1016 GCT; 11°59'N, 158°04'W; wind, 050°, force 4; weather, partly cloudy; sea, slight; wire angle, 25°.									
0	26.30	34.67	4.79	0.46	22.71	0	26.30	34.67	22.71	0.000
9	26.48	34.63	4.72	0.41	22.63	10	26.48	34.63	22.63	0.052
44	26.22	34.69	4.70	0.38	22.75	20	26.47	34.63	22.63	0.104
88	22.50	34.87	5.14	0.40	24.00	30	26.35	34.68	22.70	0.156
175	12.20	34.47	1.29	2.31	26.16	50	26.22	34.69	22.75	0.259
260	10.72	34.67	0.44	2.70	26.59	75	25.93	34.71	22.86	0.386
345	9.97	34.69	0.14	2.82	26.74	100	20.08	34.81	24.62	0.492
513	8.20	34.58	0.24	3.08	26.93	150	15.25	34.43	25.50	0.639
683	6.48	34.54	0.37	3.38	27.15	200	11.85	34.53	26.27	0.748
854	5.14	34.52	0.52	3.48	27.30	250	10.88	34.65	26.54	0.832
1028	4.38	34.52	0.91	3.42	27.39	300	10.35	34.69	26.67	0.907
1302	3.51	34.56	1.29	3.32	27.51	400	9.43	34.66	26.80	1.046
						500	8.32	34.59	26.92	1.174
						600	7.26	34.56	27.06	1.291
						700	6.30	34.54	27.17	1.397
						800	5.46	34.53	27.27	1.493
						1000	4.59	34.52	27.36	1.666
46	HUGH M. SMITH; August 3, 1950; 1832 GCT; 13°00'N, 157°58'W; wind, 010°, force 3; weather, cloudy; sea, slight; wire angle, 3°.									
0	26.20	34.61	4.76	0.31	22.70	0	26.20	34.61	22.70	0.000
10	26.32	34.56	4.77	0.33	22.62	10	26.32	34.56	22.62	0.052
50	26.24	34.61	4.78	0.32	22.69	20	26.30	34.58	22.64	0.104
99	24.46	34.76	5.04	0.27	23.34	30	26.29	34.58	22.65	0.157
198	12.06	34.54	0.49	2.41	26.24	50	26.24	34.61	22.69	0.261
295	10.54	34.67	0.26	2.50	26.62	75	26.18	34.63	22.72	0.390
393	9.55	34.63	0.29	2.62	26.76	100	24.15	34.79	23.46	0.511
586	7.36	34.51	0.35	2.89	27.00	150	15.75	34.48	25.42	0.688
780	5.69	34.47	0.47	2.88	27.20	200	12.00	34.55	26.26	0.799
974	4.72	34.49	0.76	2.95	27.32	250	11.13	34.65	26.50	0.884
1168	3.99	34.51	1.11	3.00	27.42	300	10.50	34.67	26.63	0.961
1461	3.25	34.54	1.48	2.92	27.51	400	9.48	34.62	26.76	1.104
						500	8.39	34.56	26.89	1.236
						600	7.20	34.50	27.02	1.357
						700	6.20	34.47	27.13	1.466
						800	5.55	34.48	27.22	1.566
						1000	4.63	34.49	27.33	1.747
47	HUGH M. SMITH; August 4, 1950; 0311 GCT; 14°00'N, 157°54'W; wind, 080°, force 4; weather, cloudy; sea, smooth; wire angle, 8°.									
0	26.60	34.60	4.78	0.42	22.57	0	26.60	34.60	22.57	0.000
10	26.72	34.56	4.74	0.38	22.50	10	26.72	34.56	22.50	0.053
49	26.38	34.56	4.80	0.39	22.61	20	26.63	34.56	22.53	0.107
98	24.48	34.67	5.02	0.36	23.27	30	26.51	34.56	22.56	0.160
195	12.76	34.25	2.98	1.62	25.88	50	26.38	34.56	22.60	0.266
292	9.95	34.52	0.50	2.78	26.60	75	26.29	34.56	22.63	0.397
387	8.98	34.58	0.48	2.63	26.81	100	24.15	34.71	23.40	0.520
578	7.36	34.52	0.58	3.08	27.01	150	18.35	34.72	24.99	0.709
770	5.88	34.47	0.59	3.26	27.17	200	12.25	34.27	25.99	0.836
962	4.98	34.49	0.67	3.40	27.30	250	10.50	34.44	26.45	0.929
1155	4.21	34.49	1.21	3.18	27.38	300	9.87	34.54	26.63	1.007
1446	3.24	34.54	1.56	3.15	27.52	400	8.81	34.58	26.84	1.145
						500	7.98	34.55	26.94	1.271
						600	7.16	34.51	27.03	1.388
						700	6.32	34.48	27.12	1.497
						800	5.69	34.48	27.20	1.598
						1000	4.80	34.49	27.32	1.783

OBSERVED					COMPUTED	INTERPOLATED				COMPUTED
Z	T	S	O_2	PO_4-P	σ_t	Z	T	S	σ_t	ΔD
m	°C	‰	ml/L	µg at/L	g/L	m	°C	‰	g/L	dyn. m

48

HUGH M. SMITH; August 4, 1950; 1115, 1229 GCT; 14°58'N, 157°55'W; wind, 080°, force 5; weather, partly cloudy; sea, moderate; wire angle, 8°, 7°.

0	26.10	34.69	4.78	0.36	22.79	0	26.10	34.69	22.79	0.000
10	26.33	34.67	4.76	0.33	22.70	10	26.33	34.67	22.70	0.051
49	26.32	34.63	4.81	0.32	22.67	20	26.33	34.66	22.70	0.103
97	23.08	34.99	5.22	0.27	23.93	30	26.33	34.65	22.69	0.155
192	13.44	34.33	3.22	1.19	25.80	50	26.31	34.63	22.68	0.259
287	10.28	34.54	0.79	2.46	26.56	75	26.20	34.63	22.71	0.389
382	9.20	34.56	0.46	2.43	26.76	100	22.90	35.01	23.99	0.503
574	7.18	34.51	0.62	2.73	27.03	150	18.81	34.86	24.98	0.679
766	5.62	34.49	0.73	2.92	27.22	200	12.58	34.34	25.98	0.808
960	4.72	34.51	0.84	3.12	27.34	250	10.51	34.53	26.52	0.900
1156	3.99	34.54	1.27	2.95	27.45	300	10.19	34.54	26.58	0.979
						400	8.98	34.56	26.80	1.123
1450	3.26	34.60	1.58	3.06	27.56	500	7.90	34.54	26.95	1.250
1942	2.31	34.61	2.04	2.67	27.65	600	6.92	34.51	27.07	1.366
1942	-	-	-	2.89	-	700	6.06	34.49	27.16	1.472
2438	1.91	34.65	2.82	2.57	27.72	800	5.40	34.49	27.25	1.569
2934	1.75	34.67	2.76	2.43	27.75	1000	4.62	34.51	27.35	1.748
3930	1.51	34.67	3.32	2.44	27.76					

49

HUGH M. SMITH; August 5, 1950; 0412 GCT; 17°00'N, 158°08'W; wind, 080°, force 5; weather, cloudy; sea, moderate; wire angle, 30°.

0	25.60	34.81	4.82	0.46	23.04	0	25.60	34.81	23.04	0.000
8	25.78	34.79	4.85	0.26	22.96	10	25.78	34.79	22.96	0.049
44	25.67	34.79	4.90	0.26	22.99	20	25.76	34.79	22.97	0.098
87	24.76	34.78	5.00	0.29	23.27	30	25.73	34.79	22.98	0.147
171	20.74	35.14	4.75	0.35	24.69	50	25.66	34.79	23.00	0.245
253	14.02	34.40	4.07	0.97	25.74	75	25.01	34.78	23.19	0.365
332	9.70	34.18	2.99	1.94	26.38	100	24.25	34.80	23.44	0.480
493	6.79	34.31	0.97	2.87	26.93	150	21.66	35.18	24.47	0.681
656	5.54	34.36	0.84	3.08	27.12	200	18.82	34.96	25.06	0.844
823	4.82	34.42	0.93	3.13	27.26	250	14.20	34.42	25.72	0.977
999	4.20	34.49	1.16	3.16	27.38	300	11.03	34.18	26.15	1.084
1279	3.40	34.52	1.40	3.11	27.48	400	8.08	34.30	26.73	1.251
						500	6.70	34.32	26.95	1.380
						600	5.95	34.34	27.06	1.494
						700	5.31	34.37	27.16	1.598
						800	4.89	34.41	27.24	1.694
						1000	4.19	34.49	27.38	1.867

50

HUGH M. SMITH; August 5, 1950; 2035 GCT; 19°02'N, 157°59'W; wind, 050°, force 4; weather, cloudy; sea, slight; wire angle, 3°.

0	25.90	34.72	4.88	0.31	22.87	0	25.90	34.72	22.87	0.000
10	26.12	34.70	4.85	0.26	22.79	10	26.12	34.70	22.79	0.050
50	25.30	34.72	5.04	0.23	23.06	20	26.05	34.70	22.81	0.101
99	22.87	35.12	4.97	0.24	24.08	30	26.01	34.70	22.83	0.152
196	18.96	34.96	4.54	0.40	25.02	50	25.30	34.72	23.06	0.251
292	11.60	34.18	4.09	1.17	26.05	75	23.70	34.97	23.73	0.364
388	8.02	34.09	2.56	2.11	26.58	100	22.82	35.12	24.10	0.464
580	5.70	34.25	0.84	2.61	27.02	150	20.56	35.12	24.72	0.643
774	4.86	34.38	0.92	2.57	27.22	200	18.81	34.94	25.04	0.800
967	4.22	34.47	1.10	2.77	27.36	250	16.25	34.64	25.43	0.941
1161	3.66	34.49	1.25	2.66	27.44	300	11.22	34.16	26.10	1.056
1455	2.85	34.49	1.58	2.75	27.51	400	7.82	34.09	26.61	1.231
						500	6.32	34.17	26.88	1.369
						600	5.59	34.27	27.05	1.486
						700	5.13	34.33	27.15	1.591
						800	4.78	34.40	27.25	1.687
						1000	4.10	34.48	27.38	1.858

POFI

HMS-5

OBSERVED					COMPUTED	INTERPOLATED				COMPUTED
Z	T	S	O_2	PO_4-P	σ_t	Z	T	S	σ_t	ΔD
m	°C	‰	ml/L	µg at/L	g/L	m	°C	‰	g/L	dyn. m
51	HUGH M. SMITH; August 6, 1950; 0930 GCT; 20°53'N, 158°02'W; wind, 060°, force 5; weather, partly cloudy; sea, moderate; wire angle, 25°.									
0	25.10	34.83	4.95	0.32	23.20	0	25.10	34.83	23.20	0.000
9	25.23	34.78	4.92	0.31	23.13	10	25.23	34.78	23.13	0.047
46	25.24	34.78	4.94	0.26	23.12	20	25.23	34.78	23.13	0.095
91	23.46	34.96	5.19	0.28	23.79	30	25.24	34.78	23.12	0.142
181	19.20	34.88	4.62	0.44	24.90	50	25.24	34.78	23.12	0.238
270	14.12	34.38	4.13	0.94	25.70	75	24.00	34.90	23.59	0.352
359	9.52	34.11	3.50	1.78	26.36	100	23.11	34.98	23.91	0.457
538	6.34	34.16	1.20	2.82	26.87	150	20.78	34.98	24.56	0.644
717	5.07	34.36	0.97	3.11	27.18	200	18.02	34.78	25.12	0.803
901	4.38	34.45	1.14	3.13	27.33	250	15.45	34.51	25.51	0.940
1088	3.80	34.51	1.27	3.11	27.44	300	12.32	34.24	25.96	1.057
1374	3.13	34.54	1.49	3.04	27.53	400	8.45	34.10	26.52	1.243
						500	6.78	34.14	26.79	1.389
						600	5.81	34.23	26.99	1.514
						700	5.15	34.34	27.16	1.621
						800	4.65	34.41	27.27	1.716
						1000	4.20	34.47	27.37	1.887

OBSERVED				COMPUTED	INTERPOLATED				COMPUTED
Z m	T °C	S ‰	O_2 ml/L	σ_t g/L	Z m	T °C	S ‰	σ_t g/L	ΔD dyn. m
HMCS CEDARWOOD; July 28, 1950; 0400 GCT; 48°14'N, 123°32'W; sounding, 140 m; wind, 270°, force 2; sea, rough.									1
0	9.86	31.20	5.32	24.04	0	9.86	31 20	24.04	0.000
5	9.79	31 22	-	24.06	10	9.54	31.60	24.40	0.037
9	9.63	31.58	-	24.37	20	8.82	31.80	24.67	0.071
14	9.21	31.69	-	24.52	30	8.40	32.14	24.99	0.103
23	8.65	31.87	3.98	24.75	50	7.91	32.67	25.48	0.158
46	7.94	32.63	-	25.45	75	7.32	33.24	26.01	0.214
69	7.59	33.01	-	25.79	100	6.81	33.71	26.45	0.259
91	6.80	33.69	2.16	26.44					
128	6.82	33.75	-	26.48					
HMCS CEDARWOOD; July 29, 1950; 0600 GCT; 48°17'N, 123°55'W; sounding, 179 m; wind, 270°, force 4; sea, slight.									2
0	10.43	30.88	7.35	23.69	0	10.43	30.88	23.69	0.000
5	10.39	30.88	-	23.70	10	10.27	30.90	23.73	0.042
9	10.33	30.88	-	23.71	20	9.82	31.10	23.96	0.083
14	10.04	30.99	-	23.84	30	9.31	31.44	24.31	0.121
23	9.70	31.17	5.42	24.04	50	8.38	32.12	24.98	0.187
46	8.53	32.01	3.78	24.87	75	7.48	33.07	25.86	0.251
69	7.70	32.75	-	25.57	100	6.81	33.75	26.48	0.298
91	7.00	33.71	2.56	26.42					
137	6.64	33.91	-	26.63					
HMCS CEDARWOOD; July 29, 1950; 0800 GCT; 48°23'N, 124°19'W; sounding, 140 m; wind, calm; sea, rough.									3
0	10.75	30.70	1.74	23.50	0	10.75	30.70	23.50	0.000
5	10.58	30.68	-	23.51	10	9.49	31.21	24.10	0.041
9	9.65	31.11	-	24.00	20	8.61	31.96	24.82	0.076
14	8.95	31.56	-	24.46	30	8.01	32.59	25.40	0.105
23	8.45	32.14	0.73	24.99	50	7.30	33.30	26.06	0.150
46	7.32	33.28	-	26.04	75	6.98	33.56	26.31	0.196
69	7.12	33.40	-	26.16	100	6.65	33.88	26.61	0.236
91	6.70	33.87	0.31	26.59	150	6.52			
137	6.52	33.93	-	26.66					
183	6.53	-	-	-					
HMCS CEDARWOOD; July 29, 1950; 1000 GCT; 48°30'N, 124°43'W; sounding, 453 m; wind, 270°, force 2; sea, slight.									4
0	11.71	30.61	9.45	23.26	0	11.71	30.61	23.26	0.000
5	10.86	30.68	-	23.46	10	9.85	31.10	23.96	0.043
9	9.86	31.09	-	23.95	20	9.47	31.35	24.21	0.081
14	9.76	31.17	-	24.03	30	8.62	31.97	24.83	0.116
23	9.30	31.46	4.91	24.33	50	7.63	32.95	25.74	0.170
46	7.62	32.84	-	25.66	75	7.36	33.43	26.16	0.221
69	7.50	33.35	-	26.07	100	6.89	33.61	26.36	0.266
91	7.03	33.60	2.50	26.33	150	6.35	33.66	26.47	0.348
137	6.45	33.65	-	26.45	200	6.36	33.70	26.50	0.427
229	6.37	33.72	-	26.52					
HMCS CEDARWOOD; July 29, 1950; 1300 GCT; 48°25'N, 125°10'W; sounding, 173 m; wind, 190°, force 1; sea, slight.									5
0	11.28	31.74	-	24.21	0	11.28	31.74	24.21	0.000
5	10.65	31.89	-	24.44	10	9.36	32.18	24.88	0.034
9	9.48	32.16	-	24.84	20	8.70	32.64	25.34	0.063
14	8.97	32.29	-	25.03	30	7.86	33.09	25.82	0.087
23	8.54	32.80	3.98	25.49	50	6.73	33.54	26.33	0.126
46	6.80	33.53	2.23	26.31	75	6.50	33.68	26.47	0.167
69	6.50	33.58	-	26.39	100	6.47	33.85	26.61	0.205
91	6.49	33.87	2.05	26.62					
137	6.30	33.78	-	26.57					

OBSERVED				COMPUTED	INTERPOLATED				COMPUTED
Z m	T °C	S ‰	O_2 ml/L	σ_t g/L	Z m	T °C	S ‰	σ_t g/L	ΔD dyn. m
6	HMCS CEDARWOOD; July 29, 1950; 1500 GCT; 48°20'N, 125°20'W; sounding, 256 m; wind, 270°, force 1; sea, slight.								
0	12.40	31.71	8.55	23.99	0	12.40	31.71	23.99	0.000
5	12.25	31.64	-	23.96	10	10.43	32.05	24.60	0.036
9	11.07	31.85	-	24.34	20	7.52	33.07	25.85	0.064
14	8.41	32.70	-	25.43	30	6.97	33.33	26.13	0.084
23	7.17	33.22	2.46	26.02	50	6.56	33.60	26.40	0.120
46	6.62	33.55	-	26.35	75	6.31	33.83	26.61	0.158
69	6.35	33.78	-	26.57					
91	6.26	33.93	1.45	26.70					
7	HMCS CEDARWOOD; July 29, 1950; 1700 GCT; 48°16'N, 124°50'W; sounding, 658 m; wind, 270°, force 1; sea, rough.								
0	11.76	31.51	8.82	23.95	0	11.76	31.51	23.95	0.000
5	11.44	31.56	-	24.05	10	10.61	31.81	24.38	0.038
9	10.86	31.73	-	24.28	20	8.95	32.43	25.14	0.070
14	9.74	32.10	-	24.76	30	8.15	32.75	25.51	0.096
23	8.61	32.57	3.98	25.30	50	7.34	33.23	26.00	0.141
46	7.40	33.13	-	25.91	75	7.05	33.66	26.38	0.187
69	7.10	33.58	-	26.31	100	6.81	33.80	26.52	0.227
91	6.90	33.78	-	26.49					
119	6.61	33.98	-	26.69					
8	HMCS CEDARWOOD; July 29, 1950; 1900 GCT; 48°22'N, 125°40'W; sounding, 128 m; wind, calm; sea, rough.								
0	11.79	31.65	8.97	24.05	0	11.79	31.65	24.05	0.000
5	11.70	31.71	-	24.11	10	9.65	32.34	24.96	0.034
9	10.05	32.25	-	24.82	20	7.80	32.94	25.71	0.061
14	8.40	32.66	-	25.40	30	7.23	33.30	26.07	0.082
23	7.55	33.06	2.92	25.84	50	6.63	33.66	26.44	0.118
46	6.70	33.66	-	26.43	75	6.34	33.80	26.58	0.156
69	6.39	33.75	-	26.54					
91	6.27	33.98	2.14	26.73					
9	HMCS CEDARWOOD; July 29, 1950; 2000 GCT; 48°33'N, 125°40'W; sounding, 109 m; wind, 270°, force 1; sea, rough.								
0	11.76	30.86	8.99	23.45	0	11.76	30.86	23.45	0.000
5	11.37	31.51	-	24.02	10	10.82	31.89	24.41	0.040
9	11.18	31.73	-	24.22	20	8.91	32.63	25.30	0.071
14	9.66	32.39	-	24.99	30	7.98	32.97	25.71	0.096
23	8.58	32.74	3.75	25.44	50	6.87	33.45	26.24	0.137
46	6.99	33.37	-	26.16	75	6.49	33.68	26.47	0.179
69	6.49	33.68	-	26.47					
91	6.49	33.69	1.49	26.48					
10	HMCS CEDARWOOD; July 29, 1950; 2200 GCT; 48°44'N, 125°34'W; sounding, 131 m; wind, 270°, force 3; sea, smooth.								
0	12.08	30.88	10.36	23.40	0	12.08	30.88	23.40	0.000
5	11.15	30.88	-	23.57	10	10.06	31.06	23.89	0.043
9	10.23	31.02	-	23.83	20	9.33	31.51	24.36	0.081
14	9.53	31.24	-	24.12	30	8.77	31.92	24.77	0.114
23	9.21	31.64	4.89	24.48	50	7.89	32.53	25.37	0.173
46	8.00	32.43	-	25.28	75	7.47	32.90	25.72	0.234
69	7.50	32.86	-	25.69	100	7.30	33.05	25.87	0.289
91	7.37	33.00	2.20	25.82					
110	7.21	33.10	-	25.92					
11	HMCS CEDARWOOD; July 29, 1950; 2300 GCT; 48°53'N, 125°21'W; sounding, 43 m; wind, 270°, force 2; sea, slight.								
0	14.02	31.29	6.64	23.34	0	14.02	31.29	23.34	0.000
5	13.52	31.29	-	23.44	10	11.62	31.50	23.97	0.042
9	12.52	31.40	-	23.72	20	8.85	31.87	24.72	0.078
14	8.99	31.82	-	24.66	30	8.56	32.09	24.93	0.110
23	8.77	31.92	3.28	24.77					
37	8.31	32.34	2.77	25.16					

OBSERVED				COMPUTED	INTERPOLATED				COMPUTED	
Z m	T °C	S ‰	O_2 ml/L	σ_t g/L	Z m	T °C	S ‰	σ_t g/L	ΔD dyn. m	
HMCS CEDARWOOD; August 26, 1950; 0400 GCT; 49°25'N, 126°39'W; sounding, 45 m; wind, missing; sea, slight.										12
0	13.87	30.91	5.60	23.08	0	13.87	30.91	23.08	0.000	
5	13.82	30.91	–	23.09	10	13.64	30.94	23.15	0.048	
9	13.79	30.93	–	23.11	20	11.62	31.40	23.89	0.091	
14	12.82	31.08	–	23.42	30	11.40	31.47	23.98	0.131	
18	11.62	31.40	–	23.89						
23	11.61	31.40	4.88	23.89						
27	11.60	31.40	–	23.89						
37	10.29	31.85	4.30	24.47						
HMCS CEDARWOOD; August 26, 1950; 0200 GCT; 49°13'N, 126°40'W; sounding, 203 m; wind, missing; sea, calm.										13
0	15.82	30.86	6.65	22.63	0	15.82	30.86	22.63	0.000	
9	11.03	31.65	–	24.19	10	10.86	31.80	24.33	0.044	
14	9.92	32.25	–	24.84	20	8.27	32.55	25.33	0.075	
18	8.53	32.47	–	25.23	30	7.42	32.74	25.61	0.101	
27	7.57	32.74	3.70	25.58	50	6.93	33.08	25.94	0.145	
37	7.14	32.77	–	25.67	75	7.27	33.21	26.00	0.197	
55	6.93	33.15	–	25.99	100	7.19	33.30	26.08	0.247	
73	7.28	33.21	–	26.00						
91	7.21	33.24	3.14	26.03						
137	7.17	33.89	2.35	26.54						
HMCS CEDARWOOD; August 25, 1950; 2200 GCT; 48°37'N, 126°39'W; sounding, 1,329 m; wind, missing; sea, slight.										14
0	16.28	31.96	5.54	23.37	0	16.28	31.96	23.37	0.000	
9	12.96	32.20	–	24.26	10	12.60	32.22	24.34	0.041	
23	8.89	32.47	6.51	25.18	20	9.58	32.43	25.04	0.073	
46	6.98	32.57	–	25.53	30	8.18	32.50	25.31	0.101	
69	6.26	32.65	–	25.69	50	6.76	32.58	25.57	0.152	
91	6.76	33.13	4.77	26.00	75	6.41	32.79	25.78	0.211	
137	7.34	33.73	–	26.39	100	6.95	33.29	26.10	0.263	
183	6.90	33.80	2.52	26.51	150	7.21	33.75	26.43	0.352	
274	6.28	33.91	–	26.68	200	6.77	33.82	26.54	0.431	
366	5.82	34.09	1.11	26.88	250	6.43	33.87	26.63	0.506	
549	4.91	34.16	0.85	27.04	300	6.15	33.97	26.74	0.576	
732	4.31	34.25	1.00	27.18	400	5.67	34.10	26.90	0.704	
914	3.88	34.29	0.42	27.26	500	5.18	34.13	26.99	0.821	
					600	4.72	34.18	27.08	0.930	
					800	4.13	34.27	27.21	1.129	
HMCS CEDARWOOD; August 25, 1950; 1900 GCT; 48°15'N, 126°37'W; sounding, missing; wind, missing; sea, smooth.										15
0	16.95	31.96	5.65	23.22	0	16.95	31.96	23.22	0.000	
9	16.92	31.98	–	23.24	10	16.62	31.99	23.32	0.046	
23	12.93	32.16	6.48	24.23	20	13.75	32.12	24.04	0.089	
46	7.23	32.54	–	25.47	30	10.64	32.29	24.75	0.124	
69	6.82	32.79	–	25.73	50	7.10	32.56	25.51	0.181	
91	7.22	33.40	3.89	26.15	75	6.95	32.99	25.87	0.239	
137	7.47	33.69	–	26.34	100	7.32	33.47	26.19	0.289	
183	7.13	33.82	2.25	26.49	150	7.34	33.73	26.39	0.377	
274	7.43	33.86	2.39	26.48	200	7.14	33.82	26.49	0.458	
366	6.61	34.00	1.60	26.71	250	7.38	33.84	26.47	0.538	
549	5.12	34.14	0.60	27.00	300	7.19	33.90	26.55	0.616	
732	4.37	34.25	0.55	27.17	400	6.28	34.03	26.77	0.760	
914	3.75	34.31	0.34	27.25	500	5.45	34.11	26.94	0.886	
					600	4.90	34.18	27.06	0.999	
					800	4.12	34.28	27.22	1.199	

OBSERVED				COMPUTED	INTERPOLATED				COMPUTED
Z m	T °C	S ‰	O_2 ml/L	σ_t g/L	Z m	T °C	S ‰	σ_t g/L	ΔD dyn. m
16	HMCS CEDARWOOD; August 25, 1950; 1600 GCT; 47°46'N, 126°40'W; sounding, 2,195 m; wind, 040°, force 2; sea, moderate.								
0	17.35	31.85	5.56	23.04	0	17.35	31.85	23.04	0.000
9	17.43	31.83	-	23.01	10	17.32	31.83	23.03	0.048
14	16.74	31.87	-	23.20	20	15.34	32.02	23.63	0.094
23	14.60	32.09	6.43	23.84	30	12.13	32.24	24.45	0.133
46	8.23	32.50	-	25.30	50	7.84	32.50	25.36	0.194
69	6.84	32.66	-	25.62	75	7.06	32.83	25.73	0.256
91	7.47	33.22	4.28	25.97	100	7.39	33.34	26.08	0.309
137	7.11	33.71	-	26.41	150	7.06	33.78	26.47	0.397
183	6.90	33.91	2.49	26.60	200	6.73	33.93	26.63	0.473
274	6.12	34.00	1.48	26.77	250	6.30	33.98	26.73	0.543
366	5.62	34.02	1.21	26.85	300	5.97	34.00	26.79	0.610
549	4.83	34.13	0.51	27.03	400	5.46	34.04	26.88	0.736
732	4.27	34.22	1.81	27.16	500	5.02	34.10	26.98	0.854
914	3.74	34.31	0.89	27.29	600	4.67	34.16	27.07	0.965
					800	4.07	34.25	27.20	1.165
17	HMCS CEDARWOOD; August 25, 1950; 1200 GCT; 47°46'N, 126°03'W; sounding, missing; wind, missing; sea, moderate.								
0	16.89	31.87	5.65	23.16	0	16.89	31.87	23.16	0.000
9	16.20	31.92	-	23.36	10	16.20	31.92	23.36	0.046
14	15.88	31.92	-	23.43	20	14.13	31.99	23.86	0.089
23	13.14	32.03	6.48	24.09	30	12.50	32.19	24.34	0.128
46	7.91	32.48	-	25.33	50	6.77	32.51	25.51	0.188
69	6.61	32.72	-	25.70	75	6.77	32.85	25.78	0.247
91	7.14	33.15	4.44	25.97	100	7.34	33.30	26.06	0.300
137	7.73	33.69	-	26.31	150	7.56	33.69	26.33	0.393
183	7.24	33.71	-	26.39	200	7.21	33.76	26.44	0.477
274	7.11	33.91	2.16	26.57	250	7.12	33.87	26.53	0.556
366	6.19	33.96	1.78	26.73	300	6.82	33.92	26.61	0.632
549	5.19	34.11	0.77	26.97	400	5.98	33.99	26.78	0.772
732	4.45	34.22	0.76	27.14	500	5.43	34.07	26.91	0.899
914	3.88	34.31	0.28	27.27	600	4.97	34.14	27.02	1.015
					800	4.22	34.26	27.20	1.222
18	HMCS CEDARWOOD; August 25, 1950; 0900 GCT; 47°46'N, 125°27'W; sounding, 658 m; wind, 290°, force 1; sea, moderate.								
0	16.12	31.92	6.20	23.38	0	16.12	31.92	23.38	0.000
9	15.91	31.94	-	23.44	10	15.87	31.94	23.45	0.045
14	15.74	31.94	-	23.48	20	12.79	32.16	24.26	0.085
23	11.55	32.25	6.26	24.56	30	9.77	32.35	24.94	0.119
46	7.12	32.57	-	25.51	50	7.00	32.60	25.55	0.174
69	6.79	32.88	-	25.80	75	6.98	33.08	25.93	0.230
91	7.33	33.51	3.82	26.22	100	7.29	33.62	26.31	0.278
137	7.05	33.93	-	26.59	150	6.91	33.95	26.63	0.358
183	6.60	34.00	1.72	26.71	200	6.53	34.01	26.72	0.428
274	6.21	34.05	1.41	26.80	250	6.31	34.04	26.78	0.494
366	5.82	34.07	1.06	26.86	300	6.10	34.06	26.82	0.559
19	HMCS CEDARWOOD; August 25, 1950; 0500 GCT; 47°47'N, 124°50'W; sounding, 95 m; wind, missing; sea, smooth.								
0	15.78	31.94	6.93	23.47	0	15.78	31.94	23.47	0.000
4	13.55	32.03	-	24.01	10	12.32	32.25	24.42	0.040
9	12.50	32.20	-	24.34	20	8.82	32.96	25.57	0.069
14	11.39	32.48	-	24.77	30	7.40	33.34	26.08	0.091
23	7.99	33.13	-	25.83	50	7.08	33.65	26.37	0.128
32	7.28	33.39	2.75	26.13					
46	7.12	33.60	-	26.32					
69	6.92	33.87	0.97	26.56					

OBSERVED				COMPUTED	INTERPOLATED				COMPUTED
Z m	T °C	S ‰	O_2 ml/L	σ_t g/L	Z m	T °C	S ‰	σ_t g/L	ΔD dyn. m
HMCS CEDARWOOD; August 25, 1950; 0200 GCT; 47°09'N, 124°47'W; sounding, 135 m; wind, 160°, force 1; sea, moderate.									20
0	16.71	31.78	6.21	23.14	0	16.71	31.78	23.14	0.000
5	14.56	31.76	-	23.59	10	13.66	31.81	23.82	0.044
9	13.92	31.78	-	23.74	20	10.63	32.22	24.70	0.081
14	12.58	31.94	-	24.13	30	8.25	32.71	25.46	0.110
23	9.80	32.36	4.44	24.95	50	7.21	33.13	25.94	0.156
32	7.93	32.79	-	25.57	75	6.95	33.73	26.45	0.202
46	7.26	32.99	-	25.82	100	6.85	33.92	26.61	0.240
69	7.00	33.64	-	26.37					
91	6.87	33.91	2.95	26.60					
119	6.85	33.95	-	26.63					
HMCS CEDARWOOD; August 24, 1950; 2200 GCT; 47°09'N, 125°23'W; sounding, missing; wind, 320°, force 1; sea, moderate.									21
0	17.81	32.07	5.70	23.10	0	17.81	32.07	23.10	0.000
9	17.28	32.03	-	23.20	10	17.28	32.03	23.20	0.047
14	17.27	32.03	-	23.20	20	17.26	32.04	23.21	0.094
23	17.03	32.05	5.96	23.27	30	14.56	32.06	23.82	0.138
46	10.40	32.18	-	24.71	50	9.86	32.26	24.86	0.210
69	8.01	32.57	-	25.39	75	7.78	32.61	25.45	0.281
91	7.34	32.77	5.49	25.64	100	7.34	32.94	25.77	0.341
137	7.34	33.51	-	26.22	150	7.24	33.64	26.34	0.440
183	6.98	33.91	2.88	26.58	200	6.87	33.93	26.62	0.519
366	5.86	34.07	1.36	26.86	250	6.55	33.97	26.69	0.591
549	4.92	34.22	0.65	27.09	300	6.24	34.01	26.76	0.659
732	4.25	34.31	0.72	27.23	400	5.66	34.10	26.91	0.786
914	3.78	34.38	0.38	27.34	500	5.15	34.19	27.04	0.900
					600	4.71	34.25	27.14	1.005
					800	4.05	34.34	27.28	1.192
HMCS CEDARWOOD; August 24, 1950; 1900 GCT; 47°05'N, 125°55'W; sounding, missing; wind, 320°, force 2; sea, moderate.									22
0	17.51	31.94	5.58	23.07	0	17.51	31.94	23.07	0.000
9	17.39	31.92	-	23.09	10	17.39	31.93	23.09	0.048
14	17.39	31.94	-	23.10	20	17.29	32.06	23.22	0.095
23	16.06	32.12	-	23.54	30	12.72	32.30	24.38	0.136
46	9.77	32.56	-	25.11	50	9.33	32.56	25.18	0.200
69	7.74	32.57	-	25.43	75	7.50	32.57	25.45	0.267
91	7.17	32.56	5.88	25.50	100	7.11	32.64	25.57	0.330
137	6.90	33.04	-	25.91	150	6.93	33.27	26.09	0.439
183	7.21	33.71	3.16	26.40	200	7.17	33.75	26.43	0.529
274	6.62	33.91	2.11	26.63	250	6.77	33.86	26.57	0.608
366	6.01	34.07	1.22	26.84	300	6.44	33.96	26.70	0.680
549	4.96	34.13	0.72	27.01	400	5.79	34.08	26.87	0.812
732	4.30	34.25	0.60	27.18	500	5.20	34.11	26.97	0.931
914	3.81	34.34	1.27	27.30	600	4.76	34.17	27.07	1.042
1097	-	32.83r	-	-	800	4.10	34.47	27.38	1.227

OBSERVED				COMPUTED	INTERPOLATED				COMPUTED
Z m	T °C	S ‰	O_2 ml/L	σ_t g/L	Z m	T °C	S ‰	σ_t g/L	ΔD dyn. m
23	HMCS CEDARWOOD; August 24, 1950; 1600 GCT; 47°03'N, 126°31'W; sounding, missing; wind, 320°, force 4; sea, moderate.								
0	17.29	31.87	5.68	23.07	0	17.29	31.87	23.07	0.000
9	17.31	31.89	-	23.08	10	17.32	31.89	23.08	0.048
14	17.34	31.89	-	23.07	20	16.75	31.93	23.24	0.095
23	16.29	31.96	5.89	23.37	30	13.48	32.16	24.12	0.138
46	8.98	32.45	-	25.15	50	8.60	32.45	25.21	0.203
69	7.20	32.45	-	25.41	75	6.91	32.46	25.45	0.270
91	6.44	32.54	6.31	25.58	100	6.76	32.73	25.69	0.331
137	7.51	33.35	-	26.07	150	7.41	33.51	26.21	0.435
183	7.16	33.80	2.04	26.47	200	7.01	33.80	26.49	0.520
274	6.43	33.80	2.02	26.57	250	6.60	33.80	26.55	0.598
366	5.93	33.98	1.13	26.78	300	6.28	33.86	26.64	0.672
549	5.11	34.05	0.78	26.93	400	5.76	33.99	26.81	0.810
732	4.48	34.16	0.34	27.09	500	5.31	34.03	26.89	0.936
914	4.00	34.23	0.66	27.20	600	4.92	34.08	26.98	1.055
1097	3.55	34.25	0.49	27.26	800	4.30	34.19	27.13	1.272
					1000	3.78	34.25	27.23	1.466
24	HMCS CEDARWOOD; August 24, 1950; 1000 GCT; 47°03'N, 126°25'W; sounding, missing; wind, 320°, force 4; sea, moderate.								
0	17.81	31.89	5.77	22.96	0	17.81	31.89	22.96	0.000
14	17.81	32.00	-	23.05	10	17.81	31.96	23.02	0.049
23	16.50	32.14	6.10	23.46	20	16.97	32.09	23.31	0.096
46	11.82	32.45	-	24.67	30	15.01	32.26	23.88	0.139
69	7.75	32.50	-	25.37	50	10.89	32.46	24.84	0.211
91	6.72	32.56	6.45	25.56	75	7.39	32.50	25.42	0.282
137	7.11	33.15	-	25.97	100	6.82	32.67	25.63	0.344
183	7.21	33.82	2.55	26.48	150	7.18	33.38	26.14	0.451
274	6.26	33.82	-	26.61	200	7.00	33.82	26.51	0.538
366	5.69	34.04	1.20	26.85	250	6.47	33.82	26.58	0.614
549	4.80	34.07	0.76	26.98	300	6.09	33.90	26.69	0.686
732	4.12	34.18	1.16	27.14	400	5.51	34.04	26.88	0.818
914	3.65	34.25	0.44	27.25	500	5.02	34.05	26.94	0.938
1097	3.21	34.33	-	27.36	600	4.59	34.10	27.03	1.052
					800	3.94	34.21	27.19	1.257
					1000	3.44	34.29	27.30	1.439
25	HMCS CEDARWOOD; August 24, 1950; 0700 GCT; 46°59'N, 127°58'W; sounding, 2,743 m; wind, 270°, force 5; sea, rough.								
0	17.86	31.62	5.71	22.74	0	17.86	31.62	22.74	0.000
9	17.66	31.73	-	22.88	10	17.56	31.76	22.92	0.050
14	17.17	31.89	-	23.11	20	16.73	32.03	23.32	0.098
23	16.31	32.10	5.98	23.47	30	13.33	32.24	24.21	0.139
46	8.65	32.48	-	25.22	50	8.33	32.51	25.29	0.204
69	7.15	32.61	-	25.54	75	6.93	32.61	25.57	0.268
91	6.47	32.66	6.10	25.67	100	6.39	32.78	25.77	0.326
137	6.22	33.26	-	26.17	150	6.28	33.44	26.31	0.426
183	6.36	33.80	3.54	26.58	200	6.33	33.83	26.61	0.506
274	5.91	33.93	-	26.74	250	6.10	33.91	26.70	0.577
366	4.71	33.95	1.83	26.90	300	5.50	33.93	26.79	0.644
549	4.39	34.11	0.71	27.06	400	4.66	33.98	26.93	0.768
732	3.91	34.27	0.28	27.24	500	4.49	34.07	27.02	0.882
914	3.52	34.36	1.01	27.35	600	4.25	34.16	27.11	0.987
1097	3.13	-	-	-	800	3.76	34.31	27.28	1.175
					1000	3.34			

OBSERVED				COMPUTED	INTERPOLATED				COMPUTED
Z m	T °C	S ‰	O_2 ml/L	σ_t g/L	Z m	T °C	S ‰	σ_t g/L	ΔD dyn. m
HMCS CEDARWOOD; August 24, 1950; 0200 GCT; 47°39'N, 128°05'W; sounding, missing; wind, 140°, force 3; sea, slight.									26
0	17.69	32.09	6.04	23.14	0	17.69	32.09	23.14	0.000
9	16.58	32.16	-	23.46	10	16.52	32.15	23.46	0.046
14	16.33	32.12	-	23.48	20	16.25	32.12	23.50	0.090
23	16.21	32.12	5.57	23.51	30	13.21	32.26	24.25	0.130
46	8.50	32.48	-	25.25	50	8.12	32.50	25.32	0.194
69	6.96	32.57	-	25.53	75	6.97	32.72	25.65	0.257
91	6.98	33.06	4.87	25.92	100	7.16	33.18	25.99	0.312
137	7.54	33.58	-	26.25	150	7.46	33.70	26.35	0.406
183	7.23	33.93	2.03	26.57	200	7.06	33.94	26.60	0.485
274	6.39	33.98	-	26.72	250	6.59	33.97	26.68	0.557
366	5.72	34.02	1.25	26.84	300	6.19	33.99	26.75	0.626
549	4.81	34.11	0.66	27.01	400	5.53	34.04	26.87	0.754
732	4.15	34.22	-	27.17	500	5.03	34.08	26.96	0.874
914	-	-	1.13	-	600	4.63	34.14	27.06	0.985
1097	3.24	-	-	-	800	3.86	34.25	27.23	1.184
					1000	3.32			
HMCS CEDARWOOD; August 23, 1950; 2000 GCT; 48°29'N, 128°12'W; sounding, missing; wind, missing; sea, slight.									27
0	16.59	32.25	5.70	23.52	0	16.59	32.25	23.52	0.000
9	16.43	32.20	-	23.52	10	16.42	32.19	23.52	0.044
14	16.34	32.18	-	23.53	20	16.14	32.25	23.63	0.087
23	15.82	32.29	5.98	23.73	30	12.95	32.41	24.42	0.126
46	8.44	32.59	-	25.34	50	8.13	32.59	25.39	0.187
69	6.96	32.61	-	25.57	75	6.72	32.62	25.61	0.250
91	-	-	6.40	-	100	6.29	32.71	25.73	0.309
137	6.34	33.08	-	26.06	150	6.34	33.28	26.17	0.412
183	6.26	33.66	3.98	26.48	200	6.11	33.71	26.54	0.497
274	5.58	33.89	2.94	26.75	250	5.73	33.84	26.69	0.570
366	5.15	33.98	1.93	26.87	300	5.46	33.92	26.79	0.638
549	4.29	34.11	0.84	27.07	400	4.94	34.01	26.92	0.762
732	4.14	34.22	0.50	27.17	500	4.45	34.08	27.03	0.876
914	3.91	34.34	0.65	27.29	600	4.26	34.14	27.10	0.981
1097	3.46	-	-	-	800	4.08	34.26	27.21	1.178
					1000	3.73			
HMCS CEDARWOOD; August 23, 1950; 1600 GCT; 49°00'N, 128°14'W; sounding, missing; wind, 110°, force 4; sea, slight.									28
0	16.26	32.21	5.73	23.57	0	16.26	32.21	23.57	0.000
9	15.93	32.23	-	23.66	10	15.83	32.22	23.67	0.043
14	15.08	32.21	-	23.83	20	12.46	32.34	24.46	0.081
23	11.36	32.39	5.84	24.70	30	9.95	32.43	24.98	0.114
46	7.73	32.50	-	25.37	50	7.60	32.51	25.40	0.170
69	6.97	32.56	-	25.53	75	6.69	32.58	25.58	0.232
91	6.19	32.68	6.02	25.72	100	6.33	32.82	25.81	0.290
137	6.71	33.31	-	26.15	150	6.72	33.47	26.27	0.390
183	6.74	33.77	2.30	26.51	200	6.56	33.79	26.55	0.472
274	5.90	33.87	-	26.69	250	6.09	33.84	26.65	0.546
366	5.38	34.02	1.36	26.88	300	5.74	33.92	26.75	0.616
549	4.59	34.16	1.05	27.08	400	5.22	34.05	26.92	0.742
732	3.99	34.22	0.76	27.19	500	4.78	34.13	27.03	0.856
914	3.49	34.33	-	27.33	600	4.41	34.17	27.11	0.961
1097	3.31	-	-	-	800	3.77	34.26	27.24	1.154
					1000	3.37			

OBSERVED				COMPUTED	INTERPOLATED				COMPUTED
Z m	T °C	S ‰	O_2 ml/L	σ_t g/L	Z m	T °C	S ‰	σ_t g/L	ΔD dyn. m
29	HMCS CEDARWOOD; August 23, 1950; 1200 GCT; 49°12'N, 128°15'W; sounding, missing; wind, missing; sea, slight.								
0	16.45	32.00	5.60	23.36	0	16.45	32.00	23.36	0.000
9	16.35	32.00	-	23.39	10	16.24	32.00	23.41	0.045
14	15.81	32.00	-	23.51	20	15.41	32.04	23.63	0.089
23	15.04	32.07	5.81	23.73	30	12.60	32.22	24.34	0.128
46	8.59	32.48	-	25.23	50	8.13	32.48	25.30	0.191
69	6.62	32.63	-	25.63	75	6.48	32.79	25.77	0.253
91	6.24	33.12	5.81	26.06	100	6.40	33.17	26.08	0.305
137	6.74	33.42	-	26.23	150	6.68	33.58	26.37	0.396
183	6.50	33.89	2.70	26.63	200	6.33	33.90	26.66	0.474
274	5.70	33.96	1.94	26.79	250	5.89	33.94	26.75	0.543
366	5.13	34.02	1.44	26.91	300	5.53	33.98	26.83	0.608
549	4.24	34.14	0.97	27.10	400	4.92	34.04	26.95	0.729
732	3.94	34.25	0.73	27.22	500	4.42	34.11	27.06	0.840
914	3.62	34.38	1.00	27.35	600	4.16	34.17	27.13	0.943
1097	3.24	-	-	-	800	3.83	34.30	27.27	1.130
					1000	3.45			
30	HMCS CEDARWOOD; August 23, 1950; 0800 GCT; 49°48'N, 128°17'W; sounding, 2,172 m; wind, missing; sea, moderate.								
0	14.90	31.76	6.22	23.52	0	14.90	31.76	23.52	0.000
9	15.06	31.76	-	23.49	10	14.65	31.76	23.57	0.044
14	13.27	31.76	-	23.86	20	12.14	31.88	24.17	0.084
23	11.57	31.94	5.11	24.32	30	9.82	32.13	24.77	0.119
46	7.07	32.45	-	25.43	50	6.81	32.46	25.47	0.176
69	6.17	32.66	-	25.71	75	6.32	32.84	25.83	0.235
91	6.65	33.22	4.23	26.09	100	6.77	33.30	26.13	0.286
137	7.05	33.60	-	26.33	150	6.96	33.70	26.42	0.375
183	6.77	33.89	1.89	26.60	200	6.64	33.89	26.62	0.452
274	6.10	33.91	1.69	26.70	250	6.27	33.89	26.66	0.524
366	5.53	34.11	1.11	26.93	300	5.92	33.98	26.78	0.592
549	4.98	34.16	0.68	27.03	400	5.43	34.12	26.95	0.716
732	4.38	34.20	0.42	27.13	500	5.13	34.15	27.01	0.830
914	3.79	34.33	0.78	27.30	600	4.81	34.16	27.05	0.940
1097	3.39	-	-	-	800	4.14	34.24	27.19	1.143
					1000	3.58			
31	HMCS CEDARWOOD; August 23, 1950; 0700 GCT; 50°06'N, 128°11'W; sounding, 878 m; wind, 140°, force 4; sea, missing.								
0	14.92	31.89	5.92	23.62	0	14.92	31.89	23.62	0.000
4	15.01	31.89	-	23.60	10	14.94	31.89	23.61	0.043
9	14.98	31.89	-	23.60	20	12.51	32.09	24.26	0.083
14	14.79	31.91	-	23.66	30	8.94	32.42	25.13	0.115
23	11.43	32.18	5.98	24.53	50	6.87	32.59	25.56	0.168
32	8.42	32.47	-	25.25	75	6.28	32.73	25.75	0.227
46	7.12	32.59	-	25.53	100	6.68	33.26	26.11	0.279
69	6.20	32.59	-	25.65	150	6.96	38.82	26.52	0.366
91	6.48	33.08	4.98	26.00	200	6.62	33.94	26.66	0.440
137	7.09	33.77	-	26.46	250	6.39	34.00	26.73	0.509
183	6.69	33.91	2.16	26.62	300	6.06	34.03	26.80	0.576
274	6.27	34.02	1.71	26.77	400	5.73	34.11	26.91	0.701
366	5.70	34.07	1.20	26.88	500	5.83	34.11	26.89	0.823
549	5.89	34.11	0.94	26.89	600	5.63			
732	4.30	-	-	-					
32	HMCS CEDARWOOD; August 23, 1950; 0300 GCT; 50°24'N, 128°06'W; sounding, 78 m; wind, 160°, force 3; sea, moderate.								
0	14.47	31.76	6.26	23.61	0	14.47	31.76	23.61	0.000
5	14.47	31.78	-	23.63	10	14.06	31.78	23.71	0.042
9	14.06	31.78	-	23.71	20	12.84	31.91	24.06	0.083
14	14.05	31.80	-	23.73	30	11.02	32.28	24.68	0.119
18	13.06	31.83	-	23.95	50	8.06	32.80	25.56	0.176
23	12.43	32.03	5.53	24.23					
32	10.65	32.34	-	24.79					
46	8.48	32.72	4.54	25.44					
69	7.31	33.03	3.56	25.85					

OBSERVED				COMPUTED	INTERPOLATED				COMPUTED
Z m	T °C	S ‰	O_2 ml/L	σ_t g/L	Z m	T °C	S ‰	σ_t g/L	ΔD dyn. m
HMCS CEDARWOOD; August 23, 1950; 0000 GCT; 50°17'N, 128°33'W; sounding, missing; wind, 140°, force 3; sea, moderate.									33
0	14.35	31.76	5.83	23.64	0	14.35	31.76	23.64	0.000
9	14.27	31.76	-	23.65	10	14.24	31.76	23.66	0.043
14	13.72	31.76	-	23.77	20	11.73	31.73	24.12	0.083
18	11.82	31.73	-	24.11	30	10.84	31.95	24.45	0.119
23	11.59	31.76	5.74	24.17	50	8.21	32.61	25.39	0.180
27	11.41	31.83	-	24.26	75	7.06	33.12	25.95	0.239
46	8.50	32.50	-	25.26	100	6.85	33.45	26.24	0.287
69	7.20	33.04	-	25.87	150	6.74	33.84	26.56	0.370
91	6.80	33.33	3.61	26.15	200	6.44	33.92	26.67	0.443
137	6.87	33.80	-	26.51	250	6.31	33.96	26.71	0.512
183	6.47	33.91	2.07	26.65	300	6.07	34.00	26.78	0.579
274	6.22	33.98	1.88	26.74	400	5.58	34.07	26.89	0.706
366	5.73	34.05	1.73	26.86	500	5.22	34.11	26.97	0.825
549	5.10	34.12	0.91	26.99					
HMCS CEDARWOOD; August 22, 1950; 2100 GCT; 50°14'N, 129°00'W; sounding, missing; wind, missing; sea, slight.									35
0	16.05	31.98	5.85	23.44	0	16.05	31.98	23.44	0.000
9	15.39	32.01	-	23.61	10	15.30	32.01	23.63	0.044
14	14.81	32.01	-	23.73	20	13.62	32.21	24.13	0.084
23	12.99	32.29	6.14	24.32	30	9.74	32.39	24.98	0.118
46	7.13	32.54	-	25.49	50	6.77	32.53	25.53	0.173
69	6.27	32.57	-	25.62	75	6.17	32.65	25.70	0.232
91	6.01	32.77	6.01	25.81	100	6.17	33.06	26.02	0.286
137	6.55	33.51	-	26.33	150	6.54	33.61	26.41	0.378
183	6.43	33.86	2.86	26.62	200	6.24	33.87	26.65	0.455
274	5.60	33.93	1.95	26.78	250	5.77	33.91	26.74	0.524
366	5.24	34.02	1.34	26.89	300	5.50	33.96	26.81	0.589
549	4.50	34.11	0.97	27.05	400	5.06	34.03	26.92	0.712
732	4.31	34.25	0.55	27.18	500	4.64	34.08	27.01	0.827
914	3.69	34.34	1.30	27.31	600	4.49	34.15	27.08	0.935
1097	3.23	-	-	-	800	4.06	34.29	27.24	1.131
					1000	3.45			
HMCS CEDARWOOD; August 22, 1950; 1700 GCT; 50°12'N, 129°42'W; sounding, 2,377 m; wind, 090°, force 2; sea, moderate.									36
0	14.96	31.82	5.89	23.55	0	14.96	31.82	23.55	0.000
9	14.82	31.82	-	23.58	10	14.63	31.82	23.62	0.043
14	13.99	31.82	-	23.76	20	13.47	31.82	23.86	0.085
23	13.13	31.83	5.96	23.94	30	11.58	32.00	24.36	0.123
46	8.70	32.32	-	25.09	50	8.07	32.36	25.22	0.186
69	6.22	32.66	-	25.70	75	6.29	32.82	25.82	0.249
91	6.44	33.19	4.58	26.09	100	6.55	33.32	26.18	0.299
137	6.72	33.71	-	26.46	150	6.61	33.74	26.50	0.385
183	6.34	33.82	2.16	26.60	200	6.18	33.84	26.64	0.460
274	5.62	33.93	1.91	26.78	250	5.78	33.90	26.73	0.530
366	5.23	34.04	1.10	26.91	300	5.51	33.96	26.81	0.595
549	4.59	34.16	0.71	27.08	400	5.11	34.07	26.95	0.717
732	4.03	34.22	0.55	27.19	500	4.75	34.13	27.04	0.829
914	3.63	34.34	0.97	27.32	600	4.42	34.17	27.10	0.935
1097	3.22	-	-	-	800	3.88	34.26	27.23	1.129
					1000	3.44			

OBSERVED				COMPUTED	INTERPOLATED				COMPUTED
Z m	T °C	S ‰	O_2 ml/L	σ_t g/L	Z m	T °C	S ‰	σ_t g/L	ΔD dyn. m
39	HMCS CEDARWOOD; August 22, 1950; 0300 GCT; 50°24'N, 132°43'W; sounding, missing; wind, 040°, force 2; sea, slight.								
0	15.87	32.10	6.02	23.57	0	15.87	32.10	23.57	0.000
9	14.80	32.12	-	23.82	10	14.79	32.13	23.83	0.042
14	14.69	32.16	-	23.87	20	14.50	32.17	23.92	0.082
23	14.20	32.18	6.00	23.99	30	11.42	32.32	24.64	0.119
46	7.38	32.52	-	25.44	50	7.35	32.52	25.44	0.178
69	7.25	32.52	-	25.46	75	7.23	32.53	25.47	0.241
91	7.17	32.56	6.63	25.50	100	6.83	32.70	25.65	0.302
137	5.90	33.21	-	26.17	150	5.88	33.36	26.29	0.405
183	5.85	33.64	3.18	26.52	200	5.72	33.65	26.54	0.487
274	5.17	33.75	2.69	26.69	250	5.34	33.71	26.64	0.561
366	4.56	33.98	1.54	26.94	300	4.97	33.83	26.77	0.630
549	4.12	34.13	0.85	27.10	400	4.47	34.00	26.96	0.753
732	3.76	34.33	0.70	27.30	500	4.23	34.08	27.05	0.863
914	3.36	34.38	0.85	27.38	600	4.02	34.20	27.17	0.964
1097	2.97	34.38	0 56	27.42	800	3.61	34.35	27.33	1.141
					1000	3.18	34.38	27.40	1.299
40	HMCS CEDARWOOD; August 21, 1950; 2200 GCT; 50°26'N, 133°40'W; sounding, missing; wind, 090°, force 3; sea, slight.								
0	15.53	32.07	5.97	23.62	0	15.53	32.07	23.62	0.000
9	14.97	32.10	-	23.77	10	14.90	32.10	23.78	0.042
14	14.45	32.10	-	23.88	20	13.10	32 13	24.17	0.081
23	12.42	32.16	6.51	24.33	30	10.32	32.28	24.80	0.116
46	7.00	32.52	-	25.49	50	6.69	32.54	25.55	0.172
69	5.80	32.75	-	25.82	75	5.82	32.89	25.93	0.229
91	5.92	33.22	4.63	26.18	100	6.17	33.34	26.24	0.278
137	6.71	33.73	-	26.48	150	6.60	33.81	26.56	0.360
183	6.32	33.95	2.12	26.70	200	6.11	33.96	26.74	0.431
274	5.41	34.00	1.54	26.86	250	5.60	33.98	26.82	0.497
366	5.00	34.07	-	26.96	300	5.29	34.02	26.89	0.559
549	4.22	34.22	0.52	27.17	400	4.83	34.10	27.00	0.674
732	3.74	34.34	0.35	27.31	500	4.40	34.18	27.11	0.780
914	3.29	34.40	0.34	27.40	600	4.08	34.26	27.21	0.876
1097	3.18	34.42	0.41	27.43	800	3.53	34.37	27.35	1.048
					1000	3.20	34.41	27.42	1.201
41	HMCS CEDARWOOD; August 21, 1950; 1300 GCT; 50°21'N, 135°23'W; sounding, missing; wind, 110°, force 4; sea, moderate.								
0	14.56	32.10	6.26	23.85	0	14.56	32.10	23.85	0.000
9	14.46	32.12	-	23.89	10	14.44	32.12	23.90	0.040
14	14.06	32.12	-	23.97	20	11.40	32.22	24.56	0.077
23	10.30	32.32	6.76	24.83	30	9.08	32.39	25.09	0.109
46	6.92	32.47	-	25.46	50	6.54	32.48	25.52	0.163
69	5.36	32.56	-	25.73	75	5.29	32.60	25.77	0.222
91	5.26	32.74	6.07	25.88	100	5.60	32.89	25.96	0.275
137	6.45	33.42	-	26.27	150	6.42	33.57	26.39	0.369
183	6.26	33.86	3.54	26.64	200	6.05	33.87	26.68	0.445
274	5.31	33.91	1.83	26.80	250	5.52	33.90	26.76	0.513
366	4.80	33.91	1.27	26.86	300	5.15	33.91	26.82	0.578
549	4.14	34.13	0.94	27.10	400	4.66	33.96	26.91	0.701
732	3.70	34.20	0.66	27.20	500	4.30	34.09	27.05	0.814
914	3.30	34.25	-	27.28	600	4.01	34.15	27.13	0.917
1097	2.90	-	-	-	800	3.55	34.22	27.23	1.107
					1000	3.11			

OBSERVED				COMPUTED	INTERPOLATED				COMPUTED
Z m	T °C	S ‰	O_2 ml/L	σ_t g/L	Z m	T °C	S ‰	σ_t g/L	ΔD dyn. m
HMCS CEDARWOOD; August 21, 1950; 0600 GCT; 50°18'N, 136°15'W; sounding, missing; wind, 090°, force 3; sea, moderate.									42
0	13.63	32.25	6.22	24.16	0	13.63	32.25	24.16	0.000
9	13.50	32.25	-	24.16	10	13.48	32.25	24.19	0.038
14	13.30	32.25	-	24.23	20	12.65	32.35	24.43	0.074
23	12.26	32.39	6.30	24.54	30	10.57	32.43	24.87	0.107
46	7.68	32.48	-	25.37	50	7.30	32.46	25.40	0.164
69	5.93	32.47	-	25.59	75	5.70	32.52	25.65	0.225
91	5.29	32.68	6.10	25.83	100	5.44	32.87	25.96	0.281
137	5.87	33.46	-	26.38	150	5.95	33.57	26.45	0.372
183	6.02	33.78	2.31	26.61	200	5.86	33.78	26.63	0.449
274	5.23	33.80	1.82	26.72	250	5.42	33.78	26.68	0.520
366	4.60	33.98	1.20	26.93	300	5.03	33.86	26.79	0.587
549	4.03	34.04	0.62	27.04	400	4.49	33.99	26.95	0.709
732	3.58	34.17	-	27.19	500	4.17	34.02	27.01	0.822
914	3.19	34.24	-	27.28	600	3.90	34.08	27.09	0.928
1097	2.90	34.29	-	27.35	800	3.42	34.20	27.23	1.122
					1000	3.04	34.27	27.32	1.296
HMCS CEDARWOOD; August 20, 1950; 1900 GCT; 50°04'N, 138°06'W; sounding, missing; wind, 140°, force 7; sea, moderate.									43
0	13.25	32.36	6.21	24.32	0	13.25	32.36	24.32	0.000
9	12.97	32.36	-	24.38	10	12.97	32.35	24.37	0.036
14	12.96	32.34	-	24.36	20	12.23	32.40	24.55	0.071
23	11.82	32.43	6.55	24.65	30	10.29	32.46	24.94	0.103
46	7.65	32.52	-	25.40	50	7.28	32.54	25.47	0.158
69	5.95	32.61	-	25.70	75	5.67	34.63	27.32	0.200
91	5.23	32.65	6.39	25.81	100	5.43	32.79	25.90	0.236
137	5.95	33.26	-	26.21	150	5.95	33.39	26.31	0.332
183	5.86	33.66	3.62	26.53	200	5.64	33.74	26.62	0.412
274	4.89	33.98	-	26.90	250	5.09	33.92	26.83	0.480
366	4.49	34.05	-	27.00	300	4.76	34.00	26.93	0.540
457	4.22	34.11	1.37	27.08	400	4.39	34.07	27.03	0.652
640	3.73	34.23	0.63	27.22	500	4.09	34.14	27.12	0.756
823	3.43	34.34	0.43	27.34	600	3.82	34.20	27.19	0.853
1006	3.10	-	-	-	800	3.47	34.33	27.33	1.028
					1000	3.11			
HMCS CEDARWOOD; August 20, 1950; 1500 GCT; 50°59'N, 138°03'W; sounding, 3,658 m; wind, 070°, force 5; sea, moderate.									44
0	12.68	32.32	6.37	24.40	0	12.68	32.32	24.40	0.000
9	12.71	32.34	-	24.41	10	12.71	32.34	24.41	0.035
14	12.70	32.34	-	24.41	20	11.43	32.37	24.68	0.069
23	10.81	32.39	6.62	24.80	30	9.17	32.43	25.10	0.100
46	6.58	32.52	-	25.55	50	6.40	32.54	25.58	0.153
69	5.72	32.61	-	25.72	75	5.56	32.62	25.75	0.212
91	5.27	32.63	6.40	25.79	100	5.34	32.78	25.90	0.266
137	5.63	33.33	-	26.30	150	5.78	33.50	26.42	0.360
183	6.00	33.82	2.23	26.64	200	5.86	33.83	26.67	0.436
274	5.31	33.87	-	26.77	250	5.48	33.85	26.73	0.505
366	4.72	33.96	1.53	26.90	300	5.12	33.90	26.81	0.571
549	4.12	34.11	1.12	27.09	400	4.60	33.99	26.94	0.693
732	3.65	34.22	0.94	27.22	500	4.27	34.07	27.04	0.805
914	3.30	34.36	0.63	27.37	600	3.98	34.14	27.13	0.908
1097	2.88	-	-	-	800	3.53	34.27	27.28	1.095
					1000	3.11			

OBSERVED				COMPUTED	INTERPOLATED				COMPUTED
Z m	T °C	S ‰	O_2 ml/L	σ_t g/L	Z m	T °C	S ‰	σ_t g/L	ΔD dyn. m
45	HMCS CEDARWOOD; August 20, 1950; 0800 GCT; 51°54'N, 138°00'W; sounding, missing; wind, missing; sea, moderate.								
0	12.82	32.32	6.36	24.38	0	12.82	32.32	24.38	0.000
9	12.72	32.34	-	24.41	10	12.71	32.34	24.41	0.035
14	12.68	32.36	-	24.43	20	12.65	32.38	24.46	0.071
23	12.62	32.39	6.35	24.47	30	10.34	32.43	24.91	0.103
46	6.79	32.50	-	25.50	50	6.77	32.51	25.51	0.159
69	5.72	32.57	-	25.69	75	5.52	32.61	25.75	0.218
91	5.08	32.65	6.79	25.83	100	4.94	32.76	25.93	0.272
137	4.58	33.30	-	26.40	150	4.59	33.39	26.47	0.364
183	4.61	33.49	4.51	26.54	200	4.60	33.54	26.59	0.441
274	4.53	33.74	3.09	26.75	250	4.56	33.68	27.70	0.512
366	4.33	33.95	1.53	26.94	300	4.47	33.81	26.81	0.578
549	3.94	34.11	0.86	27.11	400	4.27	33.98	26.97	0.699
732	3.43	34.22	0.91	27.24	500	4.06	34.07	27.06	0.808
914	3.21	34.34	0.55	27.36	600	3.77	34.14	27.15	0.909
1097	2.85	-	-	-	800	3.36	34.26	27.28	1.092
					1000	3.06			
46	HMCS CEDARWOOD; August 20, 1950; 0100 GCT; 51°56'N, 136°39'W; sounding, 3,658 m; wind, 220°, force 1; sea, moderate.								
0	14.41	32.34	5.98	24.07	0	14.41	32.34	24.07	0.000
9	12.83	32.32	-	24.37	10	12.81	32.32	24.38	0.037
14	12.75	32.32	-	24.39	20	11.80	32.36	24.60	0.072
23	11.34	32.38	6.54	24.70	30	9.62	32.45	25.05	0.103
46	6.84	32.56	-	25.54	50	6.58	32.56	25.58	0.157
69	5.64	32.57	-	25.70	75	5.47	32.62	25.76	0.215
91	5.19	32.77	6.03	25.91	100	5.34	32.91	26.00	0.268
137	5.68	33.39	-	26.34	150	5.63	33.53	26.46	0.359
183	5.45	33.80	2.88	26.69	200	5.24	33.80	26.72	0.433
274	4.56	33.84	2.18	26.83	250	4.74	33.82	26.79	0.499
366	4.22	33.96	1.39	26.96	300	4.45	33.88	26.87	0.561
549	3.89	34.14	0.74	27.14	400	4.17	34.00	27.00	0.678
732	3.46	34.27	0.74	27.28	500	3.99	34.10	27.09	0.784
914	3.16	34.34	0.59	27.37	600	3.76	34.18	27.18	0.882
1097	2.82	34.34	-	27.40	800	3.35	34.30	27.32	1.059
					1000	3.01	34.34	27.38	1.219
47	HMCS CEDARWOOD; August 19, 1950; 2000 GCT; 52°02'N, 135°47'W; sounding, missing; wind, 200°, force 2; sea, moderate.								
0	13.68	32.25	6.22	24.15	0	13.38	32.25	24.15	0.000
9	13.37	32.25	-	24.21	10	13.29	32.25	24.23	0.037
23	12.28	32.30	6.52	24.46	20	12.51	32.29	24.41	0.074
32	8.91	32.50	-	25.20	30	9.52	32.47	25.08	0.106
46	6.77	32.54	-	25.54	50	6.53	32.57	25.59	0.159
69	5.66	32.68	-	25.79	75	5.49	32.68	25.81	0.217
91	5.22	32.72	6.08	25.87	100	5.43	32.86	25.95	0.270
137	5.94	33.30	-	26.24	150	5.91	33.35	26.28	0.366
183	5.81	33.48	3.69	26.41	200	5.70	33.59	26.50	0.449
274	5.26	33.93	1.58	26.82	250	5.40	33.84	26.73	0.522
366	4.78	34.04	1.06	26.96	300	5.11	33.97	26.87	0.586
549	4.11	34.14	0.62	27.11	400	4.64	34.06	26.99	0.703
732	3.61	34.25	0.46	27.25	500	4.27	34.11	27.07	0.811
914	3.26	34.36	0.41	27.37	600	3.96	34.17	27.15	0.912
1097	2.91	-	-	-	800	3.48	34.29	27.30	1.094
					1000	3.10			

OBSERVED				COMPUTED	INTERPOLATED				COMPUTED
Z m	T °C	S ‰	O_2 ml/L	σ_t g/L	Z m	T °C	S ‰	σ_t g/L	ΔD dyn. m
HMCS CEDARWOOD; August 19, 1950; 1200 GCT; 51°59'N, 134°52'W; sounding, missing; wind, 140°, force 4; sea, moderate.									48
0	14.43	32.00	5.98	23.81	0	14.43	32.00	23.81	0.000
9	14.26	32.00	-	23.84	10	14.23	32.00	23.85	0.041
14	14.12	32.01	-	23.88	20	14.08	32.03	23.90	0.081
23	14.01	32.05	6.43	23.93	30	11.97	32.12	24.38	0.119
46	8.63	32.30	-	25.09	50	8.31	32.36	25.18	0.183
69	7.10	32.59	-	25.53	75	6.85	32.63	25.60	0.248
91	6.32	32.75	5.34	25.76	100	6.20	32.80	25.81	0.306
137	6.00	33.12	-	26.09	150	6.16	33.34	26.24	0.406
183	6.37	33.75	2.90	26.54	200	6.20	33.80	26.60	0.488
274	5.47	33.91	1.96	26.78	250	5.70	33.90	26.74	0.558
366	4.61	33.96	1.56	26.92	300	5.18	33.92	26.82	0.623
549	4.38	34.13	2.28	27.08	400	4.59	33.99	26.94	0.745
732	3.89	34.23	2.00	27.21	500	4.47	34.06	27.01	0.858
914	3.52	34.31	0.43	27.31	600	4.23	34.16	27.12	0.964
1097	-	34.33	-	-	800	3.74	34.27	27.25	1.154
					1000		34.33		
HMCS CEDARWOOD; August 19, 1950; 0900 GCT; 51°56'N, 133°16'W; sounding, missing; wind, missing; sea, slight.									49
0	14.81	31.92	5.91	23.66	0	14.81	31.92	23.66	0.000
9	14.37	31.94	-	23.77	10	14.12	31.95	23.83	0.042
23	11.08	32.09	6.17	24.52	20	11.71	32.06	24.38	0.080
46	7.75	32.29	-	25.21	30	9.80	32.15	24.78	0.113
69	6.92	32.52	-	25.52	50	7.59	32.33	25.26	0.173
91	6.39	32.75	5.50	25.75	75	6.74	32.58	25.57	0.237
137	6.46	33.37	-	26.23	100	6.40	32.89	25.86	0.294
183	6.52	33.77	2.00	26.54	150	6.51	33.51	26.33	0.391
274	5.82	33.86	2.44	26.70	200	6.38	33.78	26.56	0.472
366	5.25	34.00	1.37	26.88	250	5.99	33.83	26.65	0.546
549	4.62	34.07	1.01	27.00	300	5.64	33.91	26.76	0.615
732	4.07	34.18	1.19	27.15	400	5.13	34.01	26.90	0.742
914	3.99	34.29	0.43	27.24	500	4.78	34.05	26.97	0.859
1097	3.88	-	-	-	600	4.42	34.10	27.05	0.971
					800	4.04	34.22	27.18	1.175
					1000	3.94			
HMCS CEDARWOOD; August 19, 1950; 0400 GCT; 51°56'N, 132°50'W; sounding, 2,926 m; wind, missing; sea, slight.									50
0	14.21	31.91	6.20	23.78	0	14.21	31.91	23.78	0.000
5	14.23	31.94	-	23.80	10	13.95	31.96	23.87	0.041
9	14.05	31.96	-	23.85	20	12.83	32.01	24.13	0.080
23	12.44	32.03	6.12	24.22	30	10.99	32.11	24.55	0.116
46	8.63	32.29	-	25.08	50	8.44	32.34	25.15	0.178
69	7.59	32.54	-	25.42	75	7.29	32.56	25.48	0.245
91	6.70	32.65	5.53	25.63	100	6.67	32.75	25.71	0.306
137	6.60	33.13	-	26.02	150	6.60	33.25	26.12	0.411
183	6.60	33.49	-	26.31	200	6.59	33.55	26.35	0.502
274	6.54	33.77	2.66	26.53	250	6.56	33.71	26.48	0.584
366	5.66	33.93	1.87	26.77	300	6.27	33.82	26.61	0.661
549	4.63	34.09	0.71	27.02	400	5.44	33.97	26.83	0.799
732	4.01	34.18	0.43	27.16	500	4.87	34.05	26.96	0.920
914	3.64	34.33	0.29	27.31	600	4.43	34.11	27.06	1.032
1097	3.18	34.33	-	27.36	800	3.88	34.25	27.22	1.231
					1000	3.43	34.33	27.33	1.406

OBSERVED				COMPUTED	INTERPOLATED				COMPUTED
Z m	T °C	S ‰	O_2 ml/L	σ_t g/L	Z m	T °C	S ‰	σ_t g/L	ΔD dyn. m
51	HMCS CEDARWOOD; August 19, 1950; 0100 GCT; 51°59'N, 131°57'W; sounding, missing; wind, 160°, force 2; sea, smooth.								
0	14.48	31.53	6.46	23.43	0	14.48	31.53	23.43	0.000
9	12.39	31.69	-	23.97	10	12.27	31.71	24.01	0.042
14	11.65	31.80	-	24.19	20	10.04	31.96	24.60	0.078
23	9.40	32.03	5.38	24.76	30	8.99	32.14	24.91	0.110
46	8.24	32.39	-	25.21	50	8.10	32.46	25.29	0.168
69	7.58	32.70	-	25.55	75	7.49	32.73	25.59	0.232
91	7.24	32.84	3.91	25.71	100	6.97	33.00	25.87	0.289
137	6.28	33.51	-	26.36	150	6.32	33.60	26.43	0.383
183	6.35	33.77	2.70	26.56	200	6.30	33.81	26.60	0.461
274	6.00	33.93	-	26.73	250	6.11	33.90	26.69	0.533
366	5.50	34.00	1.20	26.85	300	5.86	33.95	26.76	0.601
549	4.61	34.07	-	27.00	400	5.31	34.01	26.88	0.729
732	4.09	34.22	0.36	27.18	500	4.81	34.04	26.96	0.848
914	3.61	34.23	0.43	27.24	600	4.46	34.13	27.07	0.959
					800	3.91	34.22	27.20	1.160
52	HMCS CEDARWOOD; August 18, 1950; 2100 GCT; 51°58'N, 131°16'W; sounding, missing; wind, 360°, force 1; sea, smooth.								
0	12.80	31.82	6.12	23.99	0	12.80	31.82	23.99	0.000
5	12.14	31.82	-	24.12	10	11.96	31.84	24.17	0.038
9	11.96	31.82	-	24.15	20	10.94	31.96	24.44	0.075
14	11.81	31.91	-	24.25	30	10.20	32.05	24.64	0.109
23	10.58	31.98	5.64	24.52	50	9.25	32.23	24.93	0.172
46	9.44	32.20	-	24.88	75	8.56	32.37	25.15	0.246
69	8.59	32.36	-	25.14	100	7.74	32.69	25.52	0.312
91	8.30	32.47	4.90	25.27	150	6.23	33.42	26.30	0.418
137	6.24	33.35	-	26.24	200	6.10	33.67	26.51	0.501
183	6.16	33.59	-	26.44	250	5.85	33.88	26.71	0.574
274	5.68	33.96	1.65	26.79					
53	HMCS CEDARWOOD; August 18, 1950; 1000 GCT; 52°35'N, 132°15'W; sounding, missing; wind, 140°, force 1; sea, calm.								
0	15.82	31.60	5.84	23.20	0	15.82	31.60	23.20	0.000
5	15.48	31.57	-	23.25	10	14.88	31.64	23.43	0.046
9	14.99	31.62	-	23.39	20	13.53	31.88	23.90	0.088
23	13.04	31.94	6.62	24.04	30	11.03	32.09	24.53	0.125
46	7.89	32.36	-	25.24	50	7.70	32.39	25.29	0.187
69	6.92	32.59	-	25.56	75	6.69	32.69	25.66	0.250
91	6.25	32.94	4.78	25.92	100	6.34	32.86	25.84	0.307
137	6.53	33.57	-	26.38	150	6.50	33.68	26.46	0.401
183	6.37	33.82	2.53	26.60	200	6.24	33.86	26.65	0.477
274	5.75	33.93	1.77	26.76	250	5.89	33.92	26.73	0.546
366	5.37	33.98	1.83	26.85	300	5.65	33.94	26.78	0.613
549	4.41	-	-	-	400	5.14	34.01	26.90	0.738
732	4.12	34.23	0.88	27.18	500	4.60	34.09	27.02	0.854
914	3.79	34.29	0.34	27.27	600	4.33	34.16	27.11	0.960
1097	3.23	34.29	-	27.32	800	4.02	34.26	27.22	1.154
					1000	3.56	34.29	27.29	1.334

OBSERVED				COMPUTED	INTERPOLATED				COMPUTED
Z m	T °C	S ‰	O_2 ml/L	σ_t g/L	Z m	T °C	S ‰	σ_t g/L	ΔD dyn. m
HMCS CEDARWOOD; August 18, 1950; 0600 GCT; 52°34'N, 133°04'W; sounding, 2,927 m; wind, 040°, force 2; sea, slight.									54
0	15.48	31.78	5.57	23.41	0	15.48	31.78	23.41	0.000
9	14.26	31.80	-	23.69	10	14.05	31.83	23.75	0.043
14	13.19	31.92	-	24.00	20	11.79	31.95	24.28	0.082
23	11.15	31.98	5.99	24.42	30	9.78	32.07	24.73	0.117
46	7.65	32.34	-	25.26	50	7.52	32.44	25.36	0.175
69	7.01	32.84	-	25.74	75	6.91	32.94	25.83	0.236
91	6.66	33.17	3.49	26.05	100	6.52	33.23	26.11	0.287
137	6.19	33.48	-	26.35	150	6.25	33.60	26.44	0.376
183	6.28	33.84	2.57	26.62	200	6.12	33.86	26.66	0.451
274	5.50	33.94	2.28	26.80	250	5.69	33.92	26.76	0.520
366	4.88	34.00	1.46	26.92	300	5.30	33.96	26.84	0.584
549	4.47	34.16	0.62	27.09	400	4.82	34.04	26.96	0.705
732	3.90	34.25	-	27.22	500	4.60	34.12	27.04	0.816
914	3.44	34.33	0.53	27.33	600	4.30	34.19	27.13	0.919
1097	3.03	34.33	0.63	27.37	800	3.72	34.29	27.27	1.106
					1000	3.24	34.33	27.35	1.274
HMCS CEDARWOOD; August 18, 1950; 0400 GCT; 52°35'N, 133°44'W; sounding, missing; wind, 020°, force 3; sea, smooth.									55
0	14.72	31.91	6.17	23.67	0	14.72	31.91	23.67	0.000
9	14.13	31.87	-	23.77	10	13.96	31.88	23.81	0.042
14	13.24	31.94	-	24.00	20	11.99	32.03	24.31	0.080
23	11.40	32.07	5.99	24.45	30	9.93	32.19	24.79	0.114
46	7.55	32.41	-	25.33	50	7.32	32.43	25.38	0.172
69	6.51	32.56	-	25.59	75	6.40	32.60	25.63	0.235
91	6.19	32.75	5.58	25.78	100	6.23	32.90	25.89	0.291
137	6.36	33.39	-	26.26	150	6.41	33.48	26.32	0.387
183	6.43	33.66	2.80	26.46	200	6.29	33.72	26.53	0.469
274	5.71	33.89	1.99	26.73	250	5.89	33.85	26.68	0.543
366	5.12	33.95	1.46	26.85	300	5.53	33.91	26.77	0.611
549	4.42	34.05	0.81	27.01	400	4.98	33.97	26.88	0.738
732	3.83	34.18	0.67	27.17	500	4.60	34.02	26.97	0.856
914	3.40	34.31	0.50	27.32	600	4.24	34.09	27.06	0.967
1097	3.01	34.33	0.46	27.37	800	3.66	34.24	27.24	1.164
					1000	3.21	34.33	27.35	1.334
HMCS CEDARWOOD; August 18, 1950; 0000 GCT; 52°35'N, 134°29'W; sounding, 3,227 m; wind, 020°, force 1; sea, slight.									56
0	14.40	31.91	6.20	23.74	0	14.40	31.91	23.74	0.000
5	14.22	31.89	-	23.76	10	13.47	31.94	23.95	0.041
9	13.68	31.92	-	23.90	20	11.58	32.10	24.44	0.078
23	11.07	32.14	6.21	24.56	30	9.98	32.21	24.80	0.111
46	8.11	32.38	-	25.23	50	7.89	32.43	25.30	0.170
69	6.96	32.61	-	25.57	75	6.68	32.64	25.63	0.233
91	6.14	32.74	5.71	25.77	100	6.17	32.86	25.86	0.290
137	6.34	33.30	-	26.19	150	6.48	33.47	26.31	0.388
183	6.64	33.78	2.46	26.53	200	6.39	33.77	26.55	0.469
274	5.63	33.78	2.65	26.66	250	5.82	33.77	26.63	0.543
366	5.40	33.89	-	26.77	300	5.57	33.82	26.70	0.614
549	4.83	33.98	1.27	26.91	400	5.31	33.90	26.79	0.749
732	4.02	34.13	0.98	27.11	500	5.01	33.95	26.86	0.877
914	3.60	34.29	0.39	27.28	600	4.57	34.02	26.97	0.998
1097	3.18	34.31	0.37	27.34	800	3.86	34.21	27.19	1.208
					1000	3.40	34.30	27.31	1.387

OBSERVED				COMPUTED	INTERPOLATED				COMPUTED
Z	T	S	O_2	σ_t	Z	T	S	σ_t	ΔD
m	°C	‰	ml/L	g/L	m	°C	‰	g/L	dyn. m
57	HMCS CEDARWOOD; August 17, 1950; 2000 GCT; 53°06'N, 134°26'W; sounding, missing; wind, 360°, force 1; sea, slight.								
0	13.50	32.18	6.46	24.13	0	13.50	32.18	24.13	0.000
5	13.14	32.16	-	24.19	10	13.01	32.16	24.22	0.038
14	12.93	32.16	-	24.23	20	10.56	32.25	24.73	0.072
23	9.59	32.29	6.76	24.93	30	8.27	32.33	25.16	0.102
46	6.91	32.41	-	25.42	50	6.72	32.43	25.46	0.156
69	6.23	32.54	-	25.61	75	6.19	32.57	25.63	0.217
91	6.13	32.66	5.59	25.71	100	6.16	32.73	25.76	0.275
137	6.30	33.01	-	25.97	150	6.38	33.10	26.03	0.382
183	6.54	33.30	3.58	26.16	200	6.65	33.39	26.22	0.478
274	6.72	33.69	-	26.45	250	6.77	33.61	26.38	0.566
366	5.93	33.83	-	26.66	300	6.48	33.73	26.51	0.648
549	4.80	34.05	1.02	26.97	400	5.69	33.88	26.73	0.795
732	4.07	34.18	0.50	27.15	500	5.06	34.00	26.90	0.924
914	3.61	34.31	0.49	27.30	600	4.57	34.09	27.02	1.040
1097	3.16	34.34	0.42	27.37	800	3.90	34.24	27.21	1.244
					1000	3.40	34.34	27.34	1.418
58	HMCS CEDARWOOD; August 17, 1950; 1500 GCT; 53°36'N, 134°25'W; sounding, 2,743 m; wind, missing; sea, slight.								
0	14.64	32.00	-	23.76	0	14.64	32.00	23.76	0.000
9	14.39	31.98	5.95	23.80	10	14.15	31.99	23.86	0.041
14	13.21	32.01	-	24.06	20	11.77	32.06	24.37	0.079
23	11.12	32.09	5.93	24.51	30	9.90	32.24	24.84	0.113
46	7.79	32.48	-	25.35	50	7.47	32.48	25.39	0.170
69	6.42	32.61	-	25.64	75	6.34	32.73	25.74	0.231
91	6.19	33.03	4.92	26.00	100	6.19	33.20	26.13	0.283
137	6.19	33.66	-	26.49	150	6.07	33.67	26.52	0.369
183	5.80	33.70	-	26.57	200	5.65	33.73	26.62	0.444
274	5.18	33.80	-	26.73	250	5.30	33.78	26.70	0.515
366	5.00	33.80	-	26.75	300	5.12	33.80	26.73	0.584
549	4.80	34.11	0.80	27.01	400	5.01	33.87	26.80	0.716
732	4.04	34.23	1.11	27.19	500	4.91	34.05	26.95	0.839
914	3.50	34.34	0.40	27.33	600	4.57	34.14	27.06	0.950
1097	3.01	-	-	-	800	3.83	34.27	27.25	1.147
					1000	3.26			
59	HMCS CEDARWOOD; August 17, 1950; 1100 GCT; 53°36'N, 133°33'W; sounding, 1,737 m; wind, 040°, force 1; sea, smooth.								
0	14.61	31.82	-	23.63	0	14.61	31.82	23.63	0.000
9	14.24	31.83	6.05	23.71	10	14.23	31.83	23.72	0.042
14	14.18	31.85	-	23.74	20	12.10	31.96	24.23	0.082
23	11.21	32.01	6.19	24.44	30	9.89	32.12	24.75	0.116
46	7.76	32.32	-	25.23	50	7.57	32.35	25.28	0.176
69	6.82	32.50	-	25.50	75	6.64	32.56	25.57	0.240
91	6.30	32.63	5.94	25.67	100	6.35	32.43	25.50	0.302
137	6.45	32.24	-	25.34	150	6.45	32.65	25.66	0.423
183	6.38	33.42	-	26.28	200	6.23	33.47	26.34	0.525
274	5.65	33.66	-	26.56	250	5.83	33.60	26.49	0.607
366	5.05	33.87	1.67	26.80	300	5.46	33.73	26.64	0.683
549	4.44	34.04	0.97	27.00	400	4.94	33.91	26.84	0.818
732	3.84	34.14	-	27.14	500	4.60	34.00	26.95	0.939
914	3.43	34.27	0.39	27.28	600	4.25	34.06	27.04	1.052
1097	3.03	34.29	0.36	27.34	800	3.69	34.20	27.20	1.254
					1000	3.24	34.29	27.32	1.431

OBSERVED				COMPUTED	INTERPOLATED				COMPUTED
Z m	T °C	S ‰	O_2 ml/L	σ_t g/L	Z m	T °C	S ‰	σ_t g/L	ΔD dyn. m
HMCS CEDARWOOD; August 17, 1950; 0800 GCT; 53°46'N, 133°12'W; sounding, 78 m; wind, missing; sea, smooth.									60
0	14.69	31.91	6.25	23.68	0	14.69	31.91	23.68	0.000
5	14.52	31.91	-	23.72	10	13.95	31.93	23.85	0.041
9	14.15	31.92	6.36	23.80	20	11.06	32.19	24.60	0.079
14	12.91	32.00	-	24.11	30	9.44	32.40	25.04	0.110
18	11.45	32.14	6.11	24.49	50	7.81	32.56	25.41	0.165
37	8.63	32.50	-	25.24					
59	7.77	32.59	5.31	25.44					
HMCS CEDARWOOD; August 12, 1950; 0100 GCT; 54°30'N, 133°17'W; sounding, missing; wind, missing; sea, slight.									61
0	15.00	32.20	6.06	23.84	0	15.00	32.20	23.84	0.000
5	12.87	32.20	-	24.27	10	12.78	32.23	24.31	0.038
9	12.84	32.23	5.53	24.30	20	12.10	32.17	24.40	0.074
14	12.54	32.21	-	24.34	30	11.82	32.18	24.46	0.109
23	11.93	32.16	6.63	24.42	50	10.67	32.31	24.76	0.176
46	11.56	32.27	-	24.57	75	7.25	32.49	25.43	0.249
69	7.60	32.47	-	25.37	100	6.28	32.66	25.69	0.310
91	6.49	32.57	6.28	25.60	150	5.76	33.28	26.25	0.413
137	5.73	33.08	-	26.09	200	5.77	33.78	26.64	0.493
183	5.79	33.68	1.83	26.56	250	5.61	33.84	26.71	0.564
274	5.47	33.91	-	26.78					
HMCS CEDARWOOD; August 11, 1950; 2200 GCT; 54°26'N, 133°59'W; sounding, missing; wind, missing; sea, smooth.									62
0	13.30	32.16	6.37	24.16	0	13.30	32.16	24.16	0.000
9	12.80	32.14	-	24.24	10	12.75	32.14	24.25	0.037
23	11.62	32.23	6.43	24.53	20	11.97	32.21	24.45	0.073
46	7.18	32.48	-	25.43	30	9.88	32.33	24.91	0.106
69	6.42	32.50	-	25.55	50	7.00	32.49	25.47	0.162
91	6.26	32.72	5.73	25.74	75	6.37	32.55	25.60	0.223
137	6.07	33.42	-	26.32	100	6.22	32.88	25.87	0.280
183	5.92	33.78	-	26.62	150	6.03	33.54	26.42	0.375
274	5.43	33.87	1.80	26.75	200	5.75	33.80	26.66	0.451
					250	5.46	33.86	26.74	0.520
HMCS CEDARWOOD; August 11, 1950; 1800 GCT; 54°21'N, 134°40'W; sounding, 1,463 m; wind, 220°, force 3; sea, smooth.									63
0	13.23	32.18	4.55	24.19	0	13.23	32.18	24.19	0.000
9	13.18	32.18	-	24.20	10	13.13	32.18	24.21	0.037
23	12.71	32.18	6.39	24.29	20	12.81	32.18	24.27	0.074
46	7.81	32.43	-	25.31	30	10.89	32.27	24.69	0.109
69	6.06	32.54	-	25.63	50	7.36	32.43	25.37	0.168
91	6.23	32.90	5.13	25.89	75	6.12	32.64	25.70	0.229
137	6.15	33.60	-	26.45	100	6.20	33.08	26.03	0.283
183	6.27	33.80	-	26.59	150	6.22	33.67	26.50	0.372
274	5.50	33.93	1.67	26.79	200	6.11	33.83	26.64	0.447
366	4.90	33.98	-	26.90	250	5.69	33.90	26.74	0.517
549	4.26	34.09	0.72	27.06	300	5.31	33.94	26.82	0.582
732	3.81	34.22	0.72	27.21	400	4.77	34.00	26.93	0.704
914	3.52	34.29	0.36	27.29	500	4.41	34.06	27.02	0.818
1097	-	34.25	-	-	600	4.12	34.13	27.10	0.924
					800	3.68	34.26	27.25	1.115
					1000		34.28		

OBSERVED				COMPUTED	INTERPOLATED				COMPUTED
Z m	T °C	S ‰	O_2 ml/L	σ_t g/L	Z m	T °C	S ‰	σ_t g/L	ΔD dyn. m
64	HMCS CEDARWOOD; August 11, 1950; 1500 GCT; 54°21'N, 135°29'W; sounding, 1,968 m; wind, missing; sea, calm.								
0	12.75	32.18	6.29	24.28	0	12.75	32.18	24.28	0.000
9	12.42	32.20	-	24.36	10	12.34	32.20	24.38	0.036
23	10.99	32.29	6.29	24.69	20	11.36	32.27	24.61	0.071
46	6.88	32.54	-	25.52	30	9.40	32.38	25.03	0.102
69	5.94	32.68	-	25.75	50	6.66	32.56	25.57	0.156
91	5.74	32.92	5.17	25.96	75	5.86	32.74	25.81	0.214
137	6.24	33.64	-	26.47	100	5.90	33.10	26.09	0.266
183	5.96	33.87	-	26.69	150	6.17	33.72	26.54	0.352
274	5.23	33.95	1.69	26.84	200	5.81	33.89	26.72	0.424
366	4.66	34.00	1.11	26.94	250	5.41	33.93	26.80	0.490
549	4.03	34.14	-	27.12	300	5.05	33.96	26.87	0.553
732	3.78	34.29	0.89	27.27	400	4.51	34.03	26.98	0.670
914	3.34	34.38	0.35	27.38	500	4.16	34.10	27.08	0.778
1097	2.95	34.38	-	27.42	600	3.98	34.19	27.17	0.878
					800	3.61	34.33	27.31	1.058
					1000	3.15	34.38	27.40	1.217
65	HMCS CEDARWOOD; August 11, 1950; 0800 GCT; 54°21'N, 136°48'W; sounding, 2,743 m; wind, 180°, force 1; sea, calm.								
0	12.60	32.36	6.58	24.45	0	12.60	32.36	24.45	0.000
9	12.15	32.39	-	24.56	10	12.12	32.39	24.56	0.034
23	11.14	32.41	6.61	24.76	20	11.48	32.40	24.69	0.068
46	6.40	32.63	-	25.65	30	9.31	32.48	25.12	0.098
69	5.36	32.83	-	25.94	50	6.12	32.65	25.71	0.150
91	5.69	33.26	4.32	26.24	75	5.46	32.96	26.03	0.204
137	6.19	33.82	-	26.62	100	5.84	33.41	26.34	0.250
183	6.04	33.87	-	26.68	150	6.15	33.84	26.64	0.328
274	5.58	33.93	1.76	26.78	200	5.97	33.88	26.69	0.398
366	4.85	34.00	1.44	26.92	250	5.73	33.91	26.75	0.466
549	4.25	34.11	1.26	27.07	300	5.34	33.95	26.83	0.532
732	3.68	34.25	1.26	27.24	400	4.74	34.02	26.95	0.653
914	3.26	34.34	0.69	27.36	500	4.41	34.08	27.03	0.764
1097	2.96	34.33	-	27.38	600	4.08	34.15	27.12	0.869
					800	3.51	34.30	27.30	1.053
					1000	3.10	34.34	27.37	1.216
66	HMCS CEDARWOOD; August 10, 1950; 0100 GCT; 54°24'N, 138°17'W; sounding, 3,658 m; wind, missing; sea, slight.								
0	12.30	32.36	6.25	24.51	0	12.30	32.36	24.51	0.000
9	11.81	32.38	-	24.61	10	11.77	32.38	24.62	0.034
23	11.34	32.38	6.49	24.70	20	11.41	32.38	24.69	0.067
46	6.41	32.52	-	25.57	30	9.42	32.44	25.07	0.098
69	5.42	32.54	-	25.70	50	6.21	32.53	25.60	0.151
91	4.89	32.68	6.13	25.87	75	5.25	32.56	25.74	0.209
137	4.69	33.46	-	26.51	100	4.84	32.87	26.03	0.263
183	4.58	33.71	-	26.72	150	4.66	33.54	26.58	0.349
274	4.33	33.89	1.57	26.89	200	4.53	33.75	26.76	0.419
366	4.13	34.02	0.94	27.02	250	4.39	33.85	26.85	0.483
549	3.86	34.09	-	27.10	300	4.27	33.93	26.93	0.543
732	3.48	34.25	0.66	27.26	400	4.09	34.03	27.03	0.654
914	3.13	34.33	0.54	27.36	500	3.94	34.06	27.07	0.760
1097	2.88	-	-	-	600	3.75	34.14	27.15	0.861
					800	3.34	34.29	27.31	1.042
					1000	3.00			

OBSERVED				COMPUTED	INTERPOLATED				COMPUTED
Z m	T °C	S ‰	O_2 ml/L	σ_t g/L	Z m	T °C	S ‰	σ_t g/L	ΔD dyn. m
HMCS CEDARWOOD; August 10, 1950; 1900 GCT; 54°21'N, 139°39'W; sounding, 3,483 m; wind, missing; sea, smooth.									67
0	12.00	32.47	6.50	24.65	0	12.00	32.47	24.65	0.000
9	11.54	32.47	-	24.73	10	11.50	32.47	24.74	0.033
14	11.38	32.47	-	24.76	20	11.38	32.47	24.76	0.065
23	11.21	32.47	6.40	24.79	30	9.17	32.50	25.16	0.095
46	6.06	32.46	-	25.64	50	5.93	32.58	25.67	0.146
69	5.38	32.66	-	25.80	75	5.18	32.65	25.82	0.203
91	4.85	32.72	6.48	25.91	100	5.00	33.02	26.13	0.254
137	5.40	33.84	-	26.73	150	5.45	33.85	26.73	0.335
183	5.47	33.87	-	26.75	200	5.29	33.89	26.78	0.401
274	4.66	33.95	1.53	26.90	250	4.84	33.93	26.87	0.464
366	4.18	34.00	1.17	26.99	300	4.50	33.96	26.93	0.523
549	3.86	34.14	0.66	27.14	400	4.13	34.03	27.02	0.635
732	3.38	34.26	-	27.28	500	3.96	34.10	27.10	0.740
914	3.05	34.34	-	27.38	600	3.71	34.18	27.19	0.838
1097	2.79	34.36	0.55	27.42	800	3.25	34.30	27.33	1.013
					1000	2.92	34.36	27.40	1.169
HMCS CEDARWOOD; August 10, 1950; 1300 GCT; 54°20'N, 141°00'W; sounding, 3,658 m; wind, 040°, force 2; sea, slight.									68
0	11.29	32.43	6.50	24.75	0	11.29	32.43	24.75	0.000
9	11.29	32.48	-	24.79	10	11.27	32.48	24.79	0.032
23	11.09	32.48	6.51	24.82	20	11.13	32.48	24.81	0.063
46	5.47	32.66	-	25.79	30	8.85	32.55	25.25	0.093
69	4.87	32.68	-	25.88	50	5.29	32.67	25.82	0.142
91	5.26	32.92	6.20	26.02	75	5.03	32.74	25.91	0.196
137	4.18	33.51	-	26.61	100	4.96	33.06	26.17	0.246
183	4.18	33.77	-	26.81	150	4.17	33.60	26.68	0.327
274	4.37	33.93	1.16	26.92	200	4.26	33.81	26.84	0.393
366	3.91	34.02	0.83	27.04	250	4.36	33.89	26.89	0.454
549	3.75	34.14	0.54	27.15	300	4.21	33.96	26.96	0.512
732	3.35	34.20	-	27.24	400	3.90	34.05	27.06	0.620
914	3.16	34.27	0.57	27.31	500	3.82	34.11	27.12	0.722
1097	2.94	34.29	-	27.35	600	3.62	34.16	27.18	0.819
					800	3.28	34.23	27.27	1.000
					1000	3.06	34.29	27.34	1.169
HMCS CEDARWOOD; August 10, 1950; 0400 GCT; 53°31'N, 141°00'W; sounding, 3,658 m; wind, 040°, force 5; sea, moderate.									69
0	11.30	32.41	6.51	24.73	0	11.30	32.41	24.73	0.000
9	11.08	32.41	-	24.77	10	11.04	32.42	24.78	0.032
23	9.98	32.50	6.73	25.03	20	10.32	32.48	24.95	0.063
46	5.36	32.63	-	25.78	30	8.17	32.54	25.34	0.091
69	4.60	32.74	-	25.95	50	5.19	32.65	25.82	0.140
91	4.33	32.83	6.49	26.05	75	4.51	32.75	25.97	0.193
137	4.27	33.48	-	26.57	100	4.31	32.99	26.18	0.242
183	4.26	33.71	-	26.76	150	4.27	33.55	26.63	0.324
274	4.01	33.89	1.39	26.93	200	4.21	33.75	26.79	0.391
366	3.85	34.02	1.11	27.04	250	4.07	33.85	26.89	0.453
549	3.65	34.11	0.76	27.14	300	3.96	33.93	26.96	0.511
732	3.27	34.22	-	27.26	400	3.83	34.04	27.06	0.620
914	2.95	34.31	-	27.36	500	3.72	34.08	27.11	0.722
1097	2.71	34.34	0.53	27.41	600	3.54	34.14	27.17	0.820
					800	3.14	34.26	27.30	0.998
					1000	2.83	34.33	27.39	1.158

OBSERVED				COMPUTED	INTERPOLATED				COMPUTED
Z	T	S	O_2	σ_t	Z	T	S	σ_t	ΔD
m	°C	‰	ml/L	g/L	m	°C	‰	g/L	dyn. m
70	HMCS CEDARWOOD; August 10, 1950; 0100 GCT; 52°57'N, 141°00'W; sounding, 3,658 m; wind, 040°, force 2; sea, moderate.								
0	11.08	32.38	6.35	24.75	0	11.08	32.38	24.75	0.000
23	10.77	32.43	7.00	24.84	10	10.98	32.39	24.77	0.032
46	5.73	32.57	-	25.69	20	10.82	32.42	24.82	0.064
69	5.50	32.57	-	25.72	30	8.61	32.49	25.24	0.093
91	5.35	32.59	6.82	25.75	50	5.65	32.57	25.70	0.144
137	4.21	33.08	-	26.26	75	5.38	32.58	25.74	0.201
183	4.19	33.62	-	26.69	100	5.04	32.68	25.86	0.256
274	3.94	33.89	-	26.93	150	4.21	33.26	26.40	0.351
366	3.81	33.96	1.83	27.00	200	4.13	33.69	26.75	0.425
549	3.64	34.16	1.16	27.18	250	3.99	33.84	26.89	0.488
732	3.24	34.24	-	27.28	300	3.90	33.91	26.95	0.546
914	3.00	34.27	0.80	27.33	400	3.80	34.01	27.04	0.656
1097	2.68	34.38	-	27.44	500	3.71	34.12	27.14	0.758
					600	3.51	34.19	27.21	0.852
					800	3.16	34.24	27.29	1.028
					1000	2.86	34.31	27.37	1.191
71	HMCS CEDARWOOD; August 9, 1950; 1800 GCT; 51°51'N, 140°03'W; sounding, 3,658 m; wind, 040°, force 1; sea, smooth.								
0	11.26	32.41	-	24.74	0	11.26	32.41	24.74	0.000
9	10.93	32.45	-	24.83	10	10.89	32.45	24.83	0.032
23	10.48	32.47	6.49	24.92	20	10.58	32.46	24.89	0.063
46	5.98	32.61	-	25.69	30	8.74	32.53	25.25	0.092
69	5.00	32.63	-	25.82	50	5.79	32.61	25.71	0.142
91	4.34	32.79	6.39	26.02	75	4.78	32.66	25.87	0.198
137	4.23	33.57	-	26.65	100	4.32	32.99	26.18	0.248
183	4.16	33.71	-	26.77	150	4.21	33.61	26.68	0.328
274	3.95	33.86	1.67	26.91	200	4.13	33.75	26.80	0.395
					250	4.01	33.84	26.89	0.456
72	HMCS CEDARWOOD; August 9, 1950; 1100 GCT; 51°00'N, 141°03'W; sounding, 3,658 m; wind, missing; sea, slight.								
0	11.60	32.41	6.54	24.68	0	11.60	32.41	24.68	0.000
9	11.02	32.41	-	24.78	10	11.02	32.41	24.78	0.032
23	10.82	32.43	6.54	24.83	20	10.86	32.42	24.82	0.064
46	7.40	32.56	-	25.47	30	9.66	32.48	25.06	0.094
69	5.11	32.57	-	25.76	50	6.88	32.56	25.54	0.148
91	4.53	32.81	6.62	26.01	75	4.92	32.63	25.83	0.206
137	4.28	33.44	-	26.54	100	4.46	32.96	26.14	0.257
183	4.25	33.68	-	26.73	150	4.28	33.53	26.61	0.340
274	4.08	33.80	2.34	26.85	200	4.22	33.70	26.75	0.410
366	3.82	33.96	1.26	27.00	250	4.13	33.78	26.83	0.474
549	3.57	34.11	0.83	27.14	300	4.00	33.85	26.89	0.535
732	3.29	34.21	-	27.25	400	3.78	33.99	27.03	0.648
914	2.97	34.27	-	27.33	500	3.64	34.07	27.11	0.752
1097	2.71	34.33	0.53	27.40	600	3.50	34.14	27.17	0.850
					800	3.16	34.23	27.28	1.030
					1000	2.84	34.30	27.36	1.194

OBSERVED				COMPUTED	INTERPOLATED				COMPUTED
Z m	T °C	S ‰	O_2 ml/L	σ_t g/L	Z m	T °C	S ‰	σ_t g/L	ΔD dyn. m
HMCS CEDARWOOD; August 8, 1950; 2300 GCT; 49°33'N, 141°03'W; sounding, 3,658 m; wind, missing; sea, moderate.									74
0	11.70	32.43	5.96	24.67	0	11.70	32.43	24.67	0.000
9	11.41	32.45	-	24.74	10	11.41	32.45	24.74	0.032
23	11.31	32.45	6.20	24.76	20	11.33	32.45	24.76	0.065
46	7.63	32.54	-	25.42	30	9.95	32.49	25.02	0.095
69	6.20	32.52	-	25.59	50	7.34	32.53	25.45	0.150
91	5.43	32.56	5.96	25.72	75	5.96	32.52	25.62	0.212
137	4.94	32.95	-	26.08	100	5.31	32.59	25.75	0.270
183	4.77	33.57	-	26.59	150	4.89	33.29	26.35	0.369
274	4.44	33.84	2.60	26.84	200	4.69	33.69	26.69	0.446
366	4.35	33.87	-	26.87	250	4.50	33.82	26.82	0.512
549	4.07	33.93	1.69	26.95	300	4.42	33.85	26.85	0.574
732	3.73	34.02	-	27.06	400	4.30	33.88	26.89	0.696
914	3.28	34.25	0.70	27.28	500	4.15	33.91	26.93	0.816
1097	2.86	34.36	0.57	27.41	600	3.99	33.94	26.97	0.932
					800	3.56	34.12	27.15	1.145
					1000	3.08	34.32	27.36	1.325
HMCS CEDARWOOD; August 8, 1950; 1600 GCT; 48°30'N, 141°03'W; sounding, 3,658 m; wind, 270°, force 3; sea, slight.									75
0	11.90	32.47	-	24.67	0	11.90	32.47	24.67	0.000
9	11.82	32.47	6.45	24.68	10	11.81	32.47	24.68	0.033
23	11.71	32.47	-	24.70	20	11.73	32.47	24.70	0.065
46	7.91	32.59	-	25.42	30	10.20	32.52	25.01	0.097
69	7.49	32.57	-	25.46	50	7.84	32.58	25.42	0.152
91	5.83	32.65	3.80	25.74	75	6.95	32.58	25.54	0.215
137	5.11	33.06	-	26.15	100	5.66	32.72	25.82	0.273
183	4.73	33.55	-	26.58	150	5.00	33.24	26.30	0.372
274	4.15	33.39	-	26.58	200	4.60	33.54	26.59	0.452
366	3.83	33.95	2.42	26.99	250	4.28	33.43	26.53	0.527
549	3.45	34.07	1.16	27.12	300	4.05	33.58	26.68	0.601
732	3.15	34.20	-	27.26	400	3.75	33.97	27.01	0.725
914	2.91	34.29	1.11	27.35	500	3.54	34.04	27.09	0.830
1097	2.90	34.33	0.71	27.38	600	3.36	34.11	27.16	0.929
					800	3.03	34.24	27.30	1.108
					1000	2.88	34.32	27.38	1.268
HMCS CEDARWOOD; August 8, 1950; 1000 GCT; 48°30'N, 140°06'W; sounding, 3,658 m; wind, missing; sea, moderate.									76
0	12.10	32.39	-	24.57	0	12.10	32.39	24.57	0.000
9	12.10	32.39	6.66	24.57	10	12.05	32.40	24.58	0.034
14	11.90	32.41	-	24.62	20	11.89	32.41	24.62	0.067
23	11.89	32.41	6.30	24.62	30	10.31	32.47	24.95	0.099
46	7.76	32.57	-	25.42	50	7.54	32.57	25.46	0.155
69	6.67	32.59	-	25.59	75	6.48	32.60	25.62	0.216
91	6.02	32.63	2.13	25.70	100	5.75	32.77	25.85	0.273
137	4.98	33.28	-	26.34	150	4.94	33.43	26.46	0.367
183	4.78	33.71	-	26.70	200	4.55	33.74	26.75	0.440
274	3.93	33.87	1.66	26.92	250	4.06	33.83	26.87	0.504
366	4.03	33.98	1.36	26.99	300	3.97	33.90	26.94	0.563
549	3.77	34.14	-	27.15	400	3.98	34.01	27.02	0.674
732	3.55	34.25	-	27.26	500	3.84	34.10	27.11	0.778
914	3.10	34.33	0.54	27.36	600	3.73	34.17	27.18	0.876
1097	2.73	34.42	-	27.47	800	3.37	34.28	27.30	1.055
					1000	2.92	34.37	27.41	1.213

POG

C-1

OBSERVED				COMPUTED	INTERPOLATED				COMPUTED
Z m	T °C	S ‰	O_2 ml/L	σ_t g/L	Z m	T °C	S ‰	σ_t g/L	ΔD dyn. m
77	HMCS CEDARWOOD; August 8, 1950; 0400 GCT; 48°30'N, 139°38'W; sounding, 3,658 m; wind, 270°, force 3; sea, rough.								
0	12.50	32.39	6.06	24.49	0	12.50	32.39	24.49	0.000
9	12.05	32.39	-	24.58	10	12.05	32.39	24.58	0.034
23	12.05	32.41	-	24.59	20	12.05	32.40	24.58	0.068
46	8.05	32.57	-	25.38	30	10.52	32.48	24.92	0.100
69	6.99	32.54	-	25.51	50	7.86	32.56	25.40	0.156
91	6.02	32.59	6.76	25.67	75	6.68	32.54	25.55	0.219
137	5.36	33.17	-	26.21	100	5.86	32.71	25.78	0.278
187	5.10	33.66	-	26.62	150	5.29	33.32	26.33	0.377
274	4.60	33.89	2.54	26.86	200	5.02	33.71	26.67	0.454
366	4.13	33.91	1.84	26.93	250	4.73	33.85	26.82	0.521
549	3.85	34.05	1.25	27.07	300	4.44	33.89	26.88	0.583
732	3.41	34.19	-	27.22	400	4.09	33.94	26.96	0.700
914	3.03	34.31	-	27.35	500	3.94	34.01	27.03	0.812
1097	2.74	34.40	0.38	27.45	600	3.72	34.09	27.11	0.916
					800	3.26	34.24	27.28	1.103
					1000	2.88	34.36	27.41	1.263
79	HMCS CEDARWOOD; August 7, 1950; 1200 GCT; 48°30'N, 136°39'W; sounding, 3,658 m; wind, 270°, force 4; sea, rough.								
2	12.22	32.45	7.62	24.59	0	12.22	32.45	24.59	0.000
9	12.22	32.45	-	24.59	10	12.22	32.45	24.59	0.034
18	12.22	32.45	-	24.59	20	12.22	32.46	24.60	0.067
27	12.22	32.50	7.22	24.63	30	11.61	32.50	24.74	0.100
46	8.83	32.52	-	25.23	50	8.26	32.53	25.32	0.159
69	6.33	32.56	-	25.61	75	6.10	32.55	25.63	0.222
91	5.65	32.59	6.30	25.72	100	5.61	32.70	25.81	0.279
137	5.54	33.15	-	26.17	150	5.61	33.33	26.30	0.378
183	5.67	33.68	-	26.57	200	5.52	33.71	26.61	0.458
274	4.95	33.82	2.35	26.77	250	5.12	33.79	26.73	0.528
366	4.45	33.91	1.81	26.89	300	4.78	33.85	26.81	0.594
549	4.25	33.98	1.31	26.97	400	4.42	33.92	26.91	0.718
732	3.82	34.20	0.60	27.19	500	4.33	33.95	26.94	0.836
914	3.19	34.33	0.77	27.36	600	4.23	33.99	26.98	0.951
1097	2.87	33.91	-	27.05	800	3.55	34.31	27.30	1.149
					1000	3.00	34.20	27.27	1.320
80	HMCS CEDARWOOD; August 7, 1950; 0500 GCT; 48°30'N, 135°24'W; sounding, 3,840 m; wind, 270°, force 5; sea, rough.								
2	12.40	32.41	6.30	24.53	0	12.40	32.41	24.53	0.000
9	12.40	32.41	-	24.53	10	12.40	32.41	24.53	0.034
18	12.40	32.43	-	24.54	20	12.32	32.43	24.56	0.068
27	11.69	32.45	-	24.69	30	10.76	32.47	24.87	0.101
46	7.19	32.52	-	25.46	50	6.98	32.52	25.49	0.157
69	6.08	32.52	-	25.61	75	5.77	32.55	25.67	0.217
91	5.21	32.68	6.51	25.84	100	5.32	32.82	25.94	0.273
137	5.67	33.31	-	26.28	150	5.76	33.45	26.38	0.367
183	5.84	33.71	-	26.58	200	5.68	33.74	26.62	0.445
274	5.07	33.84	2.25	26.77	250	5.25	33.81	26.73	0.515
366	4.57	33.91	1.78	26.88	300	4.92	33.86	26.80	0.581
549	3.95	34.07	1.16	27.07	400	4.42	33.94	26.92	0.704
732	3.80	34.20	1.05	27.19	500	4.07	34.03	27.03	0.817
914	3.14	34.27	-	27.31	600	3.96	34.11	27.10	0.922
1097	2.80	34.38	0.36	27.43	800	3.52	34.22	27.24	1.114
					1000	2.94	34.32	27.37	1.282

OBSERVED				COMPUTED	INTERPOLATED				COMPUTED
Z m	T °C	S ‰	O_2 ml/L	σ_t g/L	Z m	T °C	S ‰	σ_t g/L	ΔD dyn. m
HMCS CEDARWOOD; August 6, 1950; 2200 GCT; 48°34'N, 134°32'W; sounding, missing; wind, missing; sea, moderate.									81
2	12.70	32.43	-	24.48	0	12.70	32.43	24.48	0.000
9	12.69	32.45	-	24.50	10	12.68	32.44	24.50	0.035
14	12.65	32.43	-	24.49	20	12.61	32.44	24.51	0.069
23	12.59	32.45	4.63	24.52	30	10.72	32.48	24.89	0.102
46	7.77	32.52	-	25.38	50	7.56	32.52	25.41	0.158
69	6.80	32.54	-	25.53	75	6.68	32.54	25.55	0.221
91	6.40	32.59	6.66	25.62	100	6.24	32.68	25.71	0.281
137	5.76	33.10	-	26.10	150	5.72	33.30	26.27	0.383
183	5.59	33.68	-	26.58	200	5.50	33.72	26.63	0.463
274	5.07	33.84	-	26.77	250	5.21	33.81	26.73	0.533
366	4.51	33.89	1.81	26.87	300	4.89	33.85	26.80	0.599
549	3.91	34.02	1.06	27.04	400	4.38	33.91	26.90	0.723
732	3.60	34.22	0.68	27.23	500	4.04	33.98	26.99	0.839
914	3.08	34.29	0.40	27.33	600	3.85	34.09	27.10	0.946
1097	2.90	34.40	-	27.44	800	3.46	34.24	27.26	1.136
					1000	2.94	34.34	27.39	1.301
HMCS CEDARWOOD; August 6, 1950; 0900 GCT; 48°30'N, 132°52'W; sounding, 3,319 m; wind, missing; sea, rough.									82
2	13.08	32.47	-	24.44	0	13.08	32.47	24.44	0.000
9	13.09	32.41	-	24.39	10	13.09	32.42	24.40	0.035
14	13.08	32.43	-	24.41	20	13.05	32.43	24.42	0.071
23	13.04	32.43	6.07	24.42	30	11.12	32.47	24.81	0.104
46	8.04	32.54	-	25.36	50	7.79	32.54	25.40	0.161
69	6.81	32.56	-	25.55	75	6.58	32.57	25.58	0.224
91	6.10	32.57	6.37	25.65	100	6.00	32.62	25.70	0.283
137	5.78	32.90	-	25.94	150	5.86	33.08	26.08	0.390
183	5.96	33.44	-	26.35	200	5.88	33.51	26.41	0.480
274	5.50	33.73	-	26.63	250	5.63	33.67	26.57	0.559
366	4.92	33.87	-	26.81	300	5.33	33.77	26.68	0.632
549	3.91	34.09	1.02	27.09	400	4.69	33.92	26.88	0.763
732	3.48	34.20	-	27.22	500	4.12	34.04	27.03	0.878
914	3.27	34.31	-	27.33	600	3.77	34.12	27.13	0.982
1097	2.96	34.40	0.60	27.43	800	3.41	34.24	27.26	1.168
					1000	3.14	34.35	27.38	1.334
HMCS CEDARWOOD; August 6, 1950; 0700 GCT; 48°30'N, 131°37'W; sounding, 3,162 m; wind, missing; sea, rough.									83
2	13.49	32.54	6.28	24.41	0	13.49	32.54	24.41	0.000
9	13.46	32.50	-	24.39	10	13.46	32.50	24.39	0.035
14	13.46	32.50	-	24.39	20	13.45	32.48	24.38	0.071
23	13.45	32.48	6.12	24.38	30	11.69	32.51	24.74	0.105
46	8.73	32.54	-	25.26	50	8.39	32.52	25.29	0.164
69	7.10	32.50	-	25.46	75	6.86	32.52	25.51	0.299
91	6.34	32.59	6.09	25.63	100	6.25	32.66	25.70	0.289
137	5.98	33.03	-	26.02	150	5.97	33.25	26.20	0.393
183	5.89	33.68	-	26.55	200	5.76	33.71	26.59	0.476
274	5.23	33.83	-	26.74	250	5.40	33.80	26.70	0.548
366	4.65	33.93	2.04	26.89	300	5.05	33.86	26.79	0.615
549	4.05	34.09	-	27.08	400	4.52	33.96	26.93	0.739
732	3.70	34.20	-	27.20	500	4.19	34.05	27.03	0.851
914	3.45	34.29	0.48	27.30	600	3.94	34.12	27.11	0.956
1097	3.07	34.36	0.39	27.39	800	3.62	34.24	27.24	1.147
					1000	3.29	34.33	27.35	1.318

OBSERVED				COMPUTED	INTERPOLATED				COMPUTED
Z m	T °C	S ‰	O_2 ml/L	σ_t g/L	Z m	T °C	S ‰	σ_t g/L	ΔD dyn. m
84	HMCS CEDARWOOD; August 5, 1950; 2200 GCT; 48°30'N, 130°22'W; sounding, 2,841 m; wind, missing; sea, moderate.								
2	14.82	32.14	5.81	23.83	0	14.82	32.14	23.83	0.000
14	14.80	32.16	–	23.85	10	14.81	32.15	23.84	0.041
23	14.23	32.43	–	24.18	20	14.54	32.36	24.06	0.080
46	8.01	32.47	–	25.31	30	11.81	32.43	24.65	0.116
69	6.76	32.61	6.04	25.59	50	7.72	32.49	25.37	0.176
91	6.48	32.77	5.44	25.75	75	6.65	32.64	25.63	0.238
137	6.92	33.68	–	26.41	100	6.61	33.01	25.93	0.294
183	6.75	33.82	–	26.55	150	6.89	33.73	26.46	0.387
274	5.85	33.92	1.99	26.74	200	6.58	33.84	26.58	0.464
366	5.01	34.00	–	26.90	250	6.08	33.90	26.70	0.536
549	4.33	34.13	0.82	27.08	300	5.58	33.94	26.79	0.603
732	3.98	34.24	–	27.21	400	4.86	34.03	26.94	0.726
914	3.56	34.36	0.66	27.34	500	4.48	34.10	27.04	0.838
1097	3.23	34.42	0.60	27.42	600	4.24	34.16	27.12	0.943
					800	3.81	34.29	27.26	1.132
					1000	3.39	34.40	27.39	1.298
85	HMCS CEDARWOOD; August 5, 1950; 1400 GCT; 48°30'N, 128°15'W; sounding, 2,560 m; wind, missing; sea, moderate.								
0	15.21	32.09	5.86	23.71	0	15.21	32.09	23.71	0.000
9	15.21	32.09	–	23.71	10	15.21	32.09	23.71	0.042
14	15.21	32.12	–	23.73	20	15.13	32.18	23.79	0.084
23	15.09	32.21	5.64	23.83	30	12.35	32.29	24.44	0.122
46	8.08	32.43	–	25.27	50	7.78	32.43	25.31	0.184
69	6.76	32.54	–	25.54	75	6.63	32.62	25.62	0.247
91	6.42	32.86	5.13	25.83	100	6.58	33.06	25.97	0.302
137	6.91	33.64	–	26.38	150	6.83	33.70	26.44	0.394
183	6.60	33.82	–	26.57	200	6.46	33.83	26.59	0.472
274	5.89	33.85	–	26.68	250	6.07	33.84	26.65	0.545
366	5.28	33.86	2.02	26.76	300	5.70	33.84	26.70	0.615
549	4.53	34.14	0.60	27.07	400	5.12	33.92	26.83	0.749
732	4.06	34.25	0.52	27.21	500	4.70	34.08	27.00	0.868
914	3.52	34.34	0.52	27.33	600	4.44	34.17	27.11	0.975
1097	3.11	34.42	0.34	27.43	800	3.84	34.28	27.25	1.167
					1000	3.31	34.38	27.38	1.334
86	HMCS CEDARWOOD; August 5, 1950; 0700 GCT; 48°30'N, 127°52'W; sounding, 2,532 m; wind, 320°, force 6; sea, moderate.								
2	15.14	31.98	5.94	23.64	0	15.14	31.98	23.64	0.000
9	15.17	31.98	–	23.63	10	15.16	31.96	23.62	0.043
14	15.15	31.96	–	23.62	20	13.05	32.23	24.26	0.083
23	12.17	32.34	6.62	24.52	30	11.26	32.39	24.72	0.117
46	9.34	32.48	–	25.12	50	8.78	32.50	25.22	0.177
69	6.98	32.52	–	25.49	75	6.88	32.53	25.51	0.243
91	6.67	32.54	–	25.55	100	6.60	32.66	25.65	0.303
137	6.48	33.13	–	26.04	150	6.64	33.32	26.17	0.409
183	6.77	33.68	–	26.43	200	6.40	33.70	26.50	0.496
274	5.09	33.76	6.59	26.70	250	5.46	33.74	26.65	0.571
366	–	–	2.51	–	300	5.04	33.78	26.73	0.640
549	4.48	33.98	1.29	26.95	400	4.83	33.86	26.81	0.772
732	3.98	34.13	0.88	27.12	500	4.60	33.94	26.90	0.897
914	3.87	34.23	0.98	27.21	600	4.30	34.03	27.01	1.013
1097	3.63	34.31	–	27.30	800	3.95	34.17	27.15	1.224
					1000	3.77	34.27	27.25	1.414

OBSERVED				COMPUTED	INTERPOLATED				COMPUTED
Z m	T °C	S ‰	O_2 ml/L	σ_t g/L	Z m	T °C	S ‰	σ_t g/L	ΔD dyn. m
HMCS CEDARWOOD; August 5, 1950; 0300 GCT; 48°30'N, 127°12'W; sounding, 2,560 m; wind, missing; sea, moderate.									87
0	14.96	31.92	-	23.63	0	14.96	31.92	23.63	0.000
9	14.96	31.92	-	23.63	10	14.97	31.92	23.63	0.043
14	14.98	31.92	-	23.63	20	14.92	31.92	23.64	0.085
23	14.89	31.92	6.64	23.65	30	12.22	32.17	24.37	0.125
46	8.04	32.54	-	25.36	50	7.71	32.54	25.41	0.186
69	6.69	32.61	-	25.60	75	6.65	32.66	25.65	0.248
91	6.60	32.84	5.71	25.79	100	6.73	33.08	25.97	0.303
137	7.07	33.75	-	26.45	150	7.11	33.80	26.48	0.394
183	7.11	33.89	-	26.55	200	6.94	33.90	26.58	0.471
274	6.31	33.96	1.55	26.71	250	6.50	33.94	26.67	0.544
HMCS CEDARWOOD; August 4, 1950; 2200 GCT; 48°30'N, 126°35'W; sounding, 1,463 m; wind, 290°, force 3; sea, high.									88
0	13.80	31.92	6.37	23.87	0	13.80	31.92	23.87	0.000
9	13.62	31.94	-	23.92	10	13.60	31.95	23.94	0.040
14	13.48	31.98	-	23.98	20	13.29	31.98	24.02	0.080
23	13.03	31.98	6.22	24.07	30	10.82	32.17	24.63	0.116
46	7.48	32.54	-	25.44	50	7.38	32.60	25.50	0.174
69	6.84	32.94	-	25.84	75	6.53	33.11	26.02	0.230
91	6.03	33.48	3.91	26.37	100	6.43	33.56	26.38	0.276
137	7.34	33.82	-	26.46	150	7.19	33.86	26.52	0.357
183	6.84	33.93	-	26.62	200	6.72	33.94	26.64	0.431
274	6.23	33.97	-	26.73	250	6.38	33.96	26.70	0.501
366	5.68	34.00	-	26.82	300	6.06	33.98	26.76	0.569
549	5.02	34.14	0.72	27.01	400	5.55	34.03	26.86	0.698
732	4.52	34.22	0.37	27.13	500	5.18	34.11	26.97	0.818
914	3.76	34.31	0.41	27.28	600	4.91	34.16	27.04	0.930
					800	4.27	34.25	27.18	1.136
HMCS CEDARWOOD; August 4, 1950; 1800 GCT; 48°31'N, 125°56'W; sounding, 118 m; wind, 270°, force 2; sea, smooth.									89
0	11.88	31.24	-	23.72	0	11.88	31.24	23.72	0.000
5	11.88	31.26	-	23.73	10	11.92	31.31	23.77	0.042
9	11.83	31.26	6.83	23.74	20	7.71	32.20	25.14	0.077
14	10.98	31.60	-	24.16	30	7.17	32.53	25.47	0.103
18	7.92	32.03	-	24.98	50	6.79	32.89	25.81	0.151
23	7.43	32.43	-	25.36	75	6.76	33.37	26.19	0.201
46	6.79	32.79	6.45	25.73	100	6.61	33.72	26.49	0.244
69	6.76	33.28	3.49	26.12					
91	6.70	33.60	-	26.38					
115	6.39	33.89	-	26.65					
HMCS CEDARWOOD; August 4, 1950; 1500 GCT; 48°30'N, 125°21'W; sounding, 146 m; wind, 220°, force 1; sea, smooth.									90
0	10.16	32.03	7.76	24.63	0	10.16	32.03	24.63	0.000
5	9.69	32.20	-	24.84	10	9.02	32.40	25.10	0.031
9	9.11	32.36	-	25.06	20	7.85	32.98	25.73	0.057
14	8.63	32.57	-	25.30	30	7.22	33.31	26.08	0.078
23	7.53	33.15	2.60	25.91	50	6.64	33.64	26.42	0.113
46	6.70	33.60	1.73	26.38	75	6.32	33.85	26.63	0.152
69	6.42	33.80	-	26.57					
91	6.26	33.89	1.35	26.66					

POG

C-1
C-2

OBSERVED				COMPUTED	INTERPOLATED				COMPUTED
Z	T	S	O_2	σ_t	Z	T	S	σ_t	ΔD
m	°C	‰	ml/L	g/L	m	°C	‰	g/L	dyn. m
91	HMCS CEDARWOOD; August 26, 1950; 1400 GCT; 48°29'N, 124°44'W; sounding, 201 m; wind, 110°, force 3; sea, smooth.								
0	11.17	31.69	6.48	24.19	0	11.17	31.69	24.19	0.000
9	10.95	31.74	-	24.27	10	10.89	31.78	24.31	0.037
14	10.58	31.92	-	24.48	20	9.71	32.05	24.72	0.071
23	9.35	32.12	4.34	24.83	30	8.99	32.28	25.01	0.102
46	8.28	32.65	-	25.41	50	8.11	32.79	25.55	0.156
69	7.50	33.22	-	25.97	75	7.41	33.33	26.07	0.211
91	7.22	33.63	-	26.33	100	7.17	33.67	26.37	0.257
137	6.98	33.80	1.99	26.50	150	6.92	33.82	26.52	0.337
183	6.77	33.87	1.88	26.58	200	6.70	33.89	26.61	0.413
252	6.52	33.91	1.34	26.65	250	6.53	33.91	26.65	0.485
92	HMCS CEDARWOOD; August 26, 1950; 1700 GCT; 48°25'N, 124°23'W; sounding, 219 m; wind, missing; sea, smooth.								
1	9.68	31.35	4.16	24.18	0	9.68	31.35	24.18	0.000
9	9.61	31.40	-	24.23	10	9.58	31.44	24.27	0.037
14	9.47	31.58	-	24.39	20	9.34	31.62	24.45	0.073
23	9.29	31.64	3.59	24.47	30	9.25	31.65	24.48	0.108
46	9.10	31.67	-	24.52	50	9.11	31.77	24.60	0.176
69	8.78	32.30	-	25.06	75	8.42	32.52	25.29	0.252
91	7.66	33.03	-	25.80	100	7.51	33.30	26.03	0.310
137	7.00	33.77	2.07	26.47	150	6.86	33.68	26.42	0.401
183	6.59	-	1.31	-					
94	HMCS CEDARWOOD; August 26, 1950; 2200 GCT; 48°13'N, 123°34'W; sounding, missing; wind, missing; sea, smooth.								
1	10.96	30.57	4.02	23.36	0	10.96	30.57	23.36	0.000
9	9.87	30.97	-	23.85	10	9.86	30.98	23.86	0.043
14	9.80	31.02	-	23.90	20	9.57	31.40	24.24	0.082
23	9.44	31.58	3.77	24.40	30	8.96	31.93	24.75	0.116
46	8.13	32.57	-	25.37	50	8.03	32.67	25.46	0.174
69	7.58	33.10	-	25.87	75	7.42	33.22	25.98	0.231
91	7.08	33.48	1.83	26.23	100	6.95	33.59	26.34	0.278
137	6.87	33.75	1.76	26.47					
1	HMCS CEDARWOOD; September 16, 1950; 0300 GCT; 50°59'N, 128°27'W; wind, 030°, force 5; weather, overcast; sea, moderate.								
0	10.50	30.44	-	23.34	0	10.50	30.44	23.34	0.000
5	10.22	30.79	4.13	23.66	10	10.22	31.33	24.08	0.042
9	10.38	31.18	-	23.93	20	9.17	31.85	24.65	0.078
14	9.66	31.74	-	24.49	30	8.69	32.09	24.91	0.110
18	9.27	31.83	3.21	24.62	50	8.25	32.59	25.37	0.166
27	8.85	31.98	-	24.80					
37	8.44	32.32	-	25.13					
46	8.34	32.25	-	25.09					
64	7.73	32.65	-	25.49					
2	HMCS CEDARWOOD; September 17, 1950; 0600 GCT; 51°00'N, 129°06'W; wind, 020°, force 4; weather, overcast; sea, moderate.								
0	12.70	31.47	-	23.74	0	12.70	31.47	23.74	0.000
5	12.70	31.47	4.54	23.74	10	12.60	31.67	23.92	0.041
9	12.62	31.65	-	23.90	20	11.97	31.76	24.11	0.080
18	-	-	3.59	-	30	11.07	31.99	24.45	0.117
37	10.55	32.23	-	24.72	50	7.30	32.65	25.55	0.176
46	7.44	32.63	4.27	25.52	75	6.74	32.96	25.87	0.233
69	6.82	32.86	-	25.78					
91	6.70	33.33	2.20	26.17					

OBSERVED				COMPUTED	INTERPOLATED				COMPUTED
Z m	T °C	S ‰	O_2 ml/L	σ_t g/L	Z m	T °C	S ‰	σ_t g/L	ΔD dyn. m
HMCS CEDARWOOD; September 17, 1950; 1400 GCT; 50°59'N, 130°26'W; wind, 020°, force 4; weather, overcast; sea, moderate.									4
0	13.75	31.69	-	23.71	0	13.75	31.69	23.71	0.000
4	13.93	31.69	4.39	23.67	10	13.94	31.66	23.64	0.042
9	13.93	31.65	-	23.64	20	13.92	31.67	23.66	0.085
14	13.95	31.69	-	23.67	30	13.82	31.77	23.75	0.127
18	13.92	31.67	-	23.66	50	12.09	32.38	24.56	0.203
27	13.93	31.65	-	23.64	75	7.67	32.98	25.76	0.273
46	13.25	32.32	-	24.29	100	6.71	33.68	26.44	0.322
69	8.12	32.72	-	25.49	150	6.54			
91	6.76	33.42	2.39	26.23	200	6.42			
137	6.55	33.77	-	26.53	250	6.13			
183	6.48	-	2.96	-					
274	5.93	-	-	-					
HMCS CEDARWOOD; September 17, 1950; 1700 GCT; 50°55'N, 131°06'W; wind, 020°, force 4; weather, overcast; sea, moderate.									5
0	13.50	32.03	5.09	24.02	0	13.50	32.03	24.02	0.000
9	13.72	32.03	-	23.97	10	13.70	32.02	23.97	0.039
14	13.62	32.01	-	23.98	20	12.13	32.23	24.44	0.077
23	11.45	32.32	4.73	24.63	30	9.97	32.39	24.94	0.109
46	7.48	32.52	-	25.42	50	7.13	32.53	25.48	0.165
69	6.09	32.59	-	25.66	75	6.12	32.60	25.67	0.225
91	6.18	32.90	3.98	25.90	100	6.18	33.02	25.99	0.280
132	6.17	33.57	-	26.42	150	6.17	33.72	26.54	0.369
180	6.17	33.82	1.08	26.62	200	6.17	33.83	26.63	0.443
274	6.17	33.90	2.25	26.69	250	6.17	33.87	26.66	0.515
366	6.17	33.95	1.62	26.72	300	6.17	33.90	26.68	0.586
HMCS CEDARWOOD; September 17, 1950; 2100 GCT; 51°28'N, 130°56'W; wind, 020°, force 3; weather, overcast; sea, slight.									6
0	12.60	32.03	4.93	24.19	0	12.60	32.03	24.19	0.000
9	12.75	32.07	-	24.20	10	12.30	32.08	24.29	0.037
14	10.83	32.12	-	24.59	20	9.83	32.27	24.87	0.071
23	9.41	32.32	3.70	24.98	30	8.84	32.42	25.15	0.100
46	7.81	32.66	-	25.49	50	7.65	32.72	25.56	0.153
69	7.01	33.01	-	25.87	75	6.86	33.11	25.97	0.209
91	6.52	33.35	2.07	26.21	100	6.44	33.44	26.29	0.257
137	6.19	33.71	-	26.53	150	6.17	33.72	26.54	0.339
229	6.06	33.77	2.07	26.60	200	6.11	33.75	26.57	0.414
412	5.66	33.98	1.41	26.81	250	6.04	33.80	26.62	0.488
594	4.80	34.07	0.60	26.98	300	5.96	33.87	26.69	0.559
777	4.45	34.14	0.53	27.08	400	5.70	33.97	26.80	0.695
960	-	34.25	-	-	500	5.18	34.03	26.91	0.821
971	-	-	0.34	-	600	4.78	34.07	26.99	0.938
					800		34.15		
HMCS CEDARWOOD; September 18, 1950; 0100 GCT; 51°53'N, 131°05'W; wind, 020°, force 3; weather, cloudy; sea, moderate.									7
0	12.60	31.74	4.80	23.97	0	12.60	31.74	23.97	0.000
9	11.89	31.87	-	24.20	10	11.93	31.88	24.20	0.038
14	12.00	31.91	-	24.21	20	11.72	31.94	24.29	0.075
23	11.55	31.96	4.37	24.34	30	10.98	32.10	24.55	0.111
46	9.69	32.36	-	24.97	50	9.33	32.40	25.05	0.174
69	7.83	32.63	-	25.46	75	7.42	32.73	25.60	0.240
91	6.58	32.97	2.95	25.90	100	6.51	33.13	26.03	0.296
137	6.25	33.58	-	26.42	150	6.17	33.63	26.47	0.385
183	5.99	33.73	1.66	26.57	200	5.89	33.77	26.62	0.461
274	5.60	33.91	1.18	26.76	250	5.67	33.87	26.72	0.532
366	5.51	33.98	1.04	26.83	300	5.54	33.94	26.79	0.598

OBSERVED				COMPUTED	INTERPOLATED				COMPUTED
Z m	T °C	S ‰	O_2 ml/L	σ_t g/L	Z m	T °C	S ‰	σ_t g/L	ΔD dyn. m
8 HMCS CEDARWOOD; September 18, 1950; 0500 GCT; 52°16'N, 131°31'W; wind, missing; weather, cloudy; sea, slight.									
0	13.10	31.83	5.12	23.94	0	13.10	31.83	23.94	0.000
5	13.26	31.82	4.49	23.90	10	12.82	31.89	24.04	0.039
9	13.14	31.85	–	23.95	20	11.14	32.17	24.57	0.076
14	11.79	32.03	–	24.35	30	10.57	32.24	24.73	0.109
18	11.16	32.16	3.51	24.56	50	8.49	32.45	25.22	0.169
27	11.07	32.20	–	24.61	75	7.59	32.71	25.56	0.234
46	8.61	32.43	–	25.19					
69	7.83	32.63	–	25.46					
91	6.86	32.97	3.18	25.86					
9 HMCS CEDARWOOD; September 18, 1950; 0900 GCT; 52°16'N, 132°12'W; wind, 020°, force 1; weather, drizzle; sea, slight.									
0	13.03	31.91	4.75	24.02	0	13.03	31.91	24.02	0.000
9	13.12	31.91	–	24.00	10	13.12	31.90	23.99	0.039
14	13.11	31.89	–	23.99	20	13.09	31.90	24.00	0.078
23	13.01	31.91	4.77	24.02	30	11.49	32.08	24.44	0.116
46	–	32.39	–	–	50	8.21	32.43	25.25	0.178
69	6.59	32.63	–	25.63	75	6.57	32.68	25.67	0.241
91	6.52	32.86	4.39	25.82	100	6.51	33.10	26.01	0.296
137	6.46	33.75	–	26.53	150	6.36	33.78	26.57	0.384
183	6.11	33.84	1.71	26.64	200	5.98	33.86	26.68	0.456
274	5.46	33.93	1.19	26.80	250	5.62	33.91	26.76	0.524
366	4.96	34.00	0.90	26.91	300	5.31	33.95	26.83	0.589
549	4.26	34.11	0.47	27.07	400	4.80	34.02	26.94	0.710
732	4.00	34.25	0.35	27.21	500	4.40	34.08	27.04	0.822
914	3.46	34.31	0.35	27.31	600	4.22	34.16	27.12	0.927
1097	3.12	–	–	–	800	3.77	34.28	27.26	1.117
					1000	3.27			
10 HMCS CEDARWOOD; September 18, 1950; 1200 GCT; 52°12'N, 132°52'W; wind, 010°, force 4; weather, overcast; sea, moderate.									
0	13.90	31.87	5.09	23.81	0	13.90	31.87	23.81	0.000
9	13.96	31.89	–	23.82	10	13.93	31.90	23.83	0.041
14	13.75	31.92	–	23.88	20	12.42	32.04	24.24	0.080
46	8.20	32.45	–	25.27	30	10.49	32.23	24.73	0.114
69	6.59	32.63	–	25.63	50	7.81	32.47	25.34	0.173
91	6.51	32.99	2.92	25.92	75	6.57	32.74	25.72	0.235
137	6.41	33.49	–	26.33	100	6.49	33.11	26.02	0.289
183	6.07	33.75	1.64	26.58	150	6.31	33.57	26.41	0.380
274	5.50	33.95	1.33	26.81	200	5.95	33.80	26.63	0.457
366	5.17	33.98	0.89	26.87	250	5.63	33.91	26.76	0.527
732	–	–	0.24	–	300	5.38	33.96	26.83	0.591
914	–	–	0.24	–					
1097	–	–	1.03	–					
11 HMCS CEDARWOOD; September 18, 1950; 1600 GCT; 52°10'N, 133°34'W; wind, 010°, force 4; weather, overcast; sea, moderate.									
0	13.70	31.85	4.09	23.84	0	13.70	31.85	23.84	0.000
9	13.46	31.87	–	23.90	10	13.46	31.87	23.90	0.040
14	13.46	31.89	–	23.92	20	13.26	31.90	23.97	0.080
23	13.02	31.91	4.35	24.02	30	11.09	31.97	24.43	0.118
46	8.04	32.34	–	25.20	50	7.79	32.40	25.29	0.180
69	6.94	32.52	–	25.50	75	6.82	32.54	25.53	0.245
91	6.59	32.63	4.28	25.63	100	6.57	32.76	25.74	0.304
137	6.51	33.22	–	26.10	150	6.50	33.38	26.23	0.406
183	6.46	33.68	2.12	26.47	200	6.33	33.69	26.50	0.491
274	5.77	33.75	1.78	26.62	250	5.94	33.72	26.57	0.568
366	5.15	33.96	0.99	26.86	300	5.58	33.82	26.69	0.640
549	4.34	34.07	0.66	27.03	400	4.97	33.98	26.89	0.770
732	3.93	34.20	0.27	27.18	500	4.52	34.04	26.99	0.887
914	3.53	34.25	0.41	27.26	600	4.22	34.11	27.08	0.996
1097	3.28	34.34	0.00	27.35	800	3.76	34.21	27.20	1.194
					1000	3.39	34.29	27.30	1.373

OBSERVED				COMPUTED	INTERPOLATED				COMPUTED
Z m	T °C	S ‰	O_2 ml/L	σ_t g/L	Z m	T °C	S ‰	σ_t g/L	ΔD dyn. m
HMCS CEDARWOOD; September 19, 1950; 0000 GCT; 52°05'N, 134°56'W; wind, 010°, force 6; weather, squally; sea, rough.									12
0	13.70	31.91	4.92	23.89	0	13.70	31.91	23.89	0.000
9	13.68	31.89	-	23.87	10	13.68	31.89	23.88	0.040
32	13.69	31.92	3.74	23.90	20	13.68	31.90	23.89	0.081
50	8.94	32.41	-	25.12	30	13.69	31.92	23.90	0.121
77	6.80	32.81	-	25.74	50	8.94	32.41	25.12	0.190
123	6.37	33.31	2.81	26.19	75	6.91	32.78	25.71	0.254
169	6.38	33.73	-	26.52	100	6.53	33.07	25.98	0.309
260	5.92	33.89	1.60	26.71	150	6.38	33.58	26.41	0.401
352	5.43	33.98	1.04	26.84	200	6.23	33.79	26.59	0.479
535	4.43	34.07	0.51	27.02	250	5.97	33.88	26.69	0.551
717	4.33	34.14	0.38	27.09	300	5.71	33.98	26.77	0.619
900	4.03	34.20	0.29	27.17	400	5.08	34.01	26.90	0.745
1083	3.76	34.27	0.20	27.25	500	4.55	34.05	26.99	0.861
					600	4.42	34.10	27.05	0.971
					800	4.19	34.17	27.13	1.181
					1000	3.88	34.24	27.22	1.377
HMCS CEDARWOOD; September 19, 1950; 1000 GCT; 52°01'N, 136°18'W; wind, 010°, force 6; weather, overcast; sea, rough.									13
0	12.50	32.36	4.80	24.47	0	12.50	32.36	24.47	0.000
9	12.60	32.30	-	24.40	10	12.60	32.30	24.40	0.035
14	12.61	32.30	-	24.40	20	12.54	32.34	24.45	0.070
23	12.51	32.36	4.54	24.47	30	10.43	32.43	24.90	0.103
46	7.08	32.54	-	25.49	50	6.75	32.55	25.55	0.158
69	5.73	32.57	-	25.69	75	5.72	32.62	25.73	0.217
91	5.70	32.77	4.69	25.85	100	5.68	32.93	25.98	0.272
137	5.61	33.46	-	26.41	150	5.60	33.58	26.50	0.362
183	5.57	33.80	2.19	26.68	200	5.44	33.83	26.72	0.434
274	4.94	33.91	1.45	26.84	250	5.09	33.89	26.81	0.500
366	4.46	33.91	0.79	26.89	300	4.79	33.91	26.86	0.563
549	3.99	34.11	0.48	27.10	400	4.22	33.95	26.95	0.682
732	5.55	34.27	0.28	27.05	500	4.12	34.06	27.05	0.793
914	3.16	34.29	0.24	27.33	600	4.82	34.17	27.06	0.900
					800	5.12	34.28	27.11	1.112
HMCS CEDARWOOD; September 19, 1950; 1700 GCT; 51°56'N, 137°44'W; wind, 020°, force 6; weather, clear; sea, moderate.									14
0	12.20	32.36	-	24.53	0	12.20	32.36	24.53	0.000
9	12.18	32.30	4.28	24.48	10	12.19	32.32	24.50	0.034
14	12.22	32.38	-	24.54	20	12.21	32.38	24.54	0.069
23	12.20	32.38	4.49	24.54	30	10.17	32.45	24.96	0.101
46	6.90	32.56	-	25.53	50	6.59	32.56	25.58	0.155
69	5.57	32.57	-	25.71	75	5.51	32.59	25.73	0.214
91	5.36	32.68	4.83	25.82	100	5.29	32.84	25.95	0.268
137	5.08	33.39	-	26.41	150	5.07	33.52	26.52	0.359
183	5.05	33.78	-	26.73	200	4.96	33.80	26.75	0.430
274	4.60	33.89	1.35	26.86	250	4.71	33.86	26.83	0.495
366	4.27	33.96	0.84	26.95	300	4.49	33.91	26.89	0.556
549	3.96	34.16	0.34	27.14	400	4.22	34.01	27.00	0.671
732	3.58	34.25	0.24	27.25	500	4.05	34.12	27.10	0.777
914	3.11	34.36	0.50	27.39	600	3.86	34.18	27.17	0.875
					800	3.42	34.29	27.30	1.055

OBSERVED				COMPUTED	INTERPOLATED				COMPUTED
Z m	T °C	S ‰	O_2 ml/L	σ_t g/L	Z m	T °C	S ‰	σ_t g/L	ΔD dyn. m
15	HMCS CEDARWOOD; September 20, 1950; 0000 GCT; 51°53'N, 139°08'W; wind, 020°, force 6; weather, haze; sea, rough.								
0	12.00	32.39	4.03	24.59	0	12.00	32.39	24.59	0.000
9	11.96	32.35	-	24.56	10	11.96	32.36	24.57	0.034
14	11.96	32.39	-	24.59	20	11.95	32.35	24.56	0.068
23	11.94	32.34	4.39	24.56	30	11.25	32.38	24.72	0.101
46	9.42	32.47	-	25.10	50	8.69	32.50	25.23	0.161
69	6.21	32.61	-	25.66	75	5.94	32.62	25.70	0.224
91	5.37	32.63	4.98	25.78	100	5.27	32.73	25.87	0.280
137	4.96	33.17	-	26.25	150	4.93	33.37	26.41	0.374
183	4.81	33.75	2.49	26.73	200	4.69	33.79	26.77	0.448
274	4.26	33.91	1.30	26.92	250	4.38	33.88	26.88	0.510
366	4.00	33.96	1.02	26.98	300	4.18	33.92	26.93	0.569
549	3.72	34.14	0.48	27.15	400	3.95	34.00	27.02	0.681
732	3.40	34.29	0.29	27.30	500	3.80	34.09	27.11	0.786
914	3.04	34.38	0.26	27.41	600	3.64	34.19	27.20	0.883
1097	2.79	34.38	0.48	27.43	800	3.25	34.33	27.35	1.054
					1000	2.91			
16	HMCS CEDARWOOD; September 20, 1950; 1000 GCT; 52°04'N, 141°22'W; wind, 020°, force 6; weather, cloudy; sea, rough.								
0	10.80	32.43	4.15	24.83	0	10.80	32.43	24.83	0.000
9	11.16	32.45	-	24.79	10	11.16	32.45	24.79	0.031
14	11.15	32.45	-	24.79	20	11.15	32.46	24.79	0.063
23	11.15	32.47	4.44	24.80	30	9.10	32.53	25.19	0.093
46	5.87	32.63	-	25.72	50	5.65	32.64	25.75	0.143
69	4.81	32.70	-	25.90	75	4.63	32.75	25.96	0.197
91	4.29	32.92	4.92	26.13	100	4.35	33.09	26.26	0.245
137	4.44	33.58	-	26.63	150	4.35	33.64	26.69	0.324
183	4.17	33.77	2.62	26.81	200	4.12	33.79	26.83	0.390
274	3.96	33.89	1.43	26.93	250	4.01	33.86	26.90	0.450
366	3.83	34.02	1.10	27.05	300	3.92	33.93	26.97	0.508
549	3.54	34.14	0.80	27.17	400	3.78	34.04	27.07	0.616
732	3.25	34.27	0.49	27.30	500	3.62	34.11	27.14	0.716
914	2.95	34.34	0.26	27.39	600	3.46	34.18	27.21	0.810
1097	2.72	34.14	0.40	27.25	800	3.13	34.30	27.34	0.982
					1000	2.83			
17	HMCS CEDARWOOD; September 20, 1950; 1700 GCT; 52°55'N, 141°40'W; wind, 020°, force 4; weather, clear; sea, moderate.								
0	11.01	32.45	-	24.81	0	11.01	32.45	24.81	0.000
9	11.01	32.47	4.83	24.83	10	11.01	32.47	24.83	0.031
14	11.00	32.47	-	24.83	20	10.99	32.47	24.83	0.063
23	10.99	32.47	4.73	24.83	30	9.05	32.53	25.20	0.092
46	5.99	32.63	-	25.71	50	5.77	32.64	25.74	0.143
69	4.92	32.70	-	25.89	75	4.71	32.72	25.92	0.197
91	4.29	32.81	5.12	26.04	100	4.25	32.95	26.15	0.247
137	4.12	33.40	-	26.53	150	4.09	33.51	26.62	0.330
183	4.01	33.73	2.17	26.80	200	3.97	33.77	26.83	0.397
274	3.85	33.91	0.84	26.96	250	3.89	33.87	26.92	0.457
366	3.76	34.04	0.65	27.07	300	3.82	33.95	26.99	0.514
549	-	-	0.80	-					
732	-	-	0.34	-					
914	-	-	0.35	-					

OBSERVED				COMPUTED	INTERPOLATED				COMPUTED
Z m	T °C	S ‰	O_2 ml/L	σ_t g/L	Z m	T °C	S ‰	σ_t g/L	ΔD dyn. m

HMCS CEDARWOOD; September 21, 1950; 0000 GCT; 53°55'N, 141°11'W; wind, 010°, force 3; weather, clear; sea, rough. 18

0	11.80	32.34	4.89	24.58	0	11.80	32.34	24.58	0.000
9	11.73	32.41	-	24.65	10	11.73	32.40	24.64	0.033
14	11.71	32.39	-	24.64	20	11.70	32.39	24.64	0.066
23	11.69	32.39	4.54	24.64	30	10.01	32.45	24.98	0.098
46	7.08	32.56	-	25.51	50	6.67	32.57	25.57	0.152
69	5.11	32.66	-	25.83	75	4.77	32.69	25.89	0.209
91	4.12	32.81	5.03	26.06	100	4.15	32.98	26.19	0.259
137	4.23	33.49	-	26.59	150	4.21	33.57	26.65	0.340
183	4.17	33.73	2.15	26.78	200	4.13	33.75	26.80	0.407
274	4.00	33.87	1.04	26.91	250	4.04	33.83	26.87	0.469
366	3.89	34.04	0.79	27.06	300	3.97	33.92	26.95	0.528
549	3.54	34.18	0.41	27.20	400	3.81	34.07	27.09	0.635
732	3.33	34.27	0.41	27.29	500	3.62	34.15	27.17	0.733
914	2.97	34.34	0.39	27.38	600	3.50	34.21	27.23	0.825
1097	2.75	34.40	0.54	27.45	800	3.18	34.30	27.33	0.995
					1000	2.85	34.37	27.42	1.149

HMCS CEDARWOOD; September 22, 1950; 0500 GCT; 54°43'N, 138°00'W; wind, 010°, force 9; weather, clear; sea, rough. 21

0	11.40	32.30	-	24.63	0	11.40	32.30	24.63	0.000
9	11.39	32.30	-	24.63	10	11.39	32.29	24.62	0.033
14	11.41	32.27	-	24.60	20	11.42	32.30	24.62	0.067
23	11.43	32.32	4.84	24.64	30	9.35	32.43	25.08	0.098
46	6.19	32.65	-	25.70	50	6.04	32.68	25.74	0.149
69	5.55	32.90	-	25.97	75	5.47	33.00	26.06	0.202
91	5.39	33.26	4.78	26.27	100	5.62	33.41	26.37	0.248
137	6.19	33.82	-	26.62	150	6.15	33.84	26.64	0.326
183	6.01	33.89	5.10	26.70	200	5.89	33.90	26.72	0.395
274	5.41	33.95	2.07	26.82	250	5.56	33.94	26.79	0.462
366	4.85	33.98	1.48	26.91	300	5.24	33.96	26.85	0.525
549	4.20	34.11	0.75	27.08	400	4.72	34.01	26.94	0.645
732	3.69	34.22	0.55	27.22	500	4.36	34.08	27.04	0.757
914	3.30	34.21	0.40	27.33	600	4.05	34.14	27.12	0.861
1097	-	34.33	0.52	-	800	3.54	34.26	27.27	1.050
					1000		34.32		

HMCS CEDARWOOD; September 22, 1950; 1200 GCT; 54°40'N, 136°29'W; wind, 010°, force 6; weather, cloudy; sea, rough. 22

0	11.60	32.25	-	24.55	0	11.60	32.25	24.55	0.000
9	11.57	32.23	4.57	24.54	10	11.57	32.24	24.55	0.034
13	11.58	32.25	-	24.55	20	11.58	32.25	24.55	0.068
23	11.58	32.25	-	24.55	30	9.98	32.34	24.90	0.100
46	7.30	32.50	-	25.43	50	6.96	32.51	25.49	0.156
69	5.81	32.63	-	25.73	75	5.58	32.84	25.92	0.214
87	5.39	32.90	4.14	25.99	100	5.51	32.98	26.04	0.265
91	5.41	32.81	4.28	25.92	150	5.57	33.59	26.51	0.353
137	5.67	33.51	-	26.44	200	5.26	33.78	26.70	0.426
183	5.35	33.75	4.44	26.67	250	5.01	33.86	26.79	0.493
274	4.91	33.89	1.43	26.83	300	4.83	33.92	26.86	0.555
457	4.39	34.07	0.46	27.03	400	4.54	34.02	26.97	0.674
640	3.94	34.20	0.28	27.18	500	4.28	34.11	27.07	0.782
823	3.50	34.27	0.84	27.28	600	4.04	34.18	27.15	0.883
					800	3.55	34.26	27.27	1.069

POG C-2 WJS-3

OBSERVED				COMPUTED	INTERPOLATED				COMPUTED
Z m	T °C	S ‰	O_2 ml/L	σ_t g/L	Z m	T °C	S ‰	σ_t g/L	ΔD dyn. m
23	HMCS CEDARWOOD; September 22, 1950; 1800 GCT; 54°37'N, 134°50'W; wind, 010°, force 5; weather, overcast; sea, rough.								
0	11.80	32.23	4.84	24.50	0	11.80	32.23	24.50	0.000
9	11.76	32.25	-	24.52	10	11.76	32.24	24.51	0.034
14	11.75	32.21	-	24.49	20	11.75	32.21	24.49	0.069
23	11.75	32.21	4.58	24.49	30	11.03	32.24	24.65	0.103
46	9.32	32.36	-	25.03	50	8.74	32.42	25,16	0.164
69	6.73	32.68	-	25.65	75	6.48	32.75	25.74	0.228
91	5.99	32.94	3.86	25.95	100	6.03	33.09	26.06	0.281
137	6.09	33.55	-	26.42	150	6.04	33.63	26.49	0.369
183	5.91	33.80	1.86	26.64	200	5.82	33.83	26.67	0.443
274	5.46	33.93	1.09	26.80	250	5.57	33.90	26.76	0.512
366	5.05	33.98	1.02	26.88	300	5.34	33.94	26.82	0.577
549	4.23	34.09	0.45	27.06	400	4.87	34.00	26.92	0.699
732	3.71	34.20	0.39	27.20	500	4.42	34.06	27.02	0.814
914	3.25	34.25	-	27.29	600	4.08	34.13	27.11	0.919
1097	-	-	2.27	-	800	3.53	34.23	27.24	1.111
24	HMCS CEDARWOOD; September 22, 1950; 2000 GCT; 54°40'N, 134°24'W; wind, 010°, force 7; weather, rain showers; sea, rough.								
0	12.00	32.12	4.88	24.38	0	12.00	32.12	24.38	0.000
9	11.89	32.18	-	24.44	10	11.90	32.17	24.43	0.035
14	11.91	32.14	-	24.41	20	11.90	32.14	24.41	0.071
23	11.90	32.14	4.54	24.41	30	10.45	32.29	24.78	0.104
46	8.04	32.56	-	25.38	50	7.77	32.60	25.45	0.161
69	6.81	32.79	-	25.73	75	6.64	32.86	25.80	0.221
91	6.30	33.04	3.59	25.99	100	6.24	33.18	26.11	0.273
137	6.09	33.60	-	26.46	150	6.09	33.66	26.51	0.360
183	6.09	33.80	-	26.62	200	5.92	33.83	26.66	0.434
274	5.34	33.95	1.06	26.83	250	5.51	33.92	26.78	0.502
366	4.92	34.02	0.79	26.93	300	5.22	33.97	26.86	0.565
549	4.08	34.13	0.44	27.11	400	4.73	34.04	26.97	0.684
732	3.67	34.20	0.36	27.21	500	4.26	34.10	27.07	0.793
914	3.28	34.25	1.74	27.28	600	3.96	34.15	27.14	0.895
					800	3.52	34.22	27.24	1.085
1	CGS WM. J. STEWART; October 2, 1950; 0800 GCT; 48°31'N, 124°44'W; wind, 090°, force 3; weather, clear; sea, smooth.								
0	9.20	31.91	6.00	24.69	0	9.20	31.91	24.69	0.000
9	9.10	31.94	-	24.73	10	9.09	31.97	24.76	0.032
14	9.00	32.07	-	24.85	20	8.70	32.22	25.01	0.063
23	8.58	32.29	4.12	25.09	30	8.47	32.48	25.25	0.092
46	8.18	32.88	-	25.61	50	8.05	33.00	25.72	0.142
69	7.63	33.39	-	26.09	75	7.60	33.41	26.11	0.195
91	7.50	33.48	2.73	26.17	100	7.36	33.55	26.25	0.241
137	6.95	33.77	-	26.48	150	6.88	33.82	26.53	0.324
183	6.87	33.87	1.74	26.57					
2	CGS WM. J. STEWART; October 2, 1950; 1000 GCT; 48°10'N, 124°48'W; wind, 090°, force 3; weather, clear; sea, smooth.								
0	9.31	32.56	3.20	25.18	0	9.31	32.56	25.18	0.000
5	9.31	32.57	-	25.19	10	8.41	32.70	25.43	0.027
9	8.42	32.70	-	25.43	20	8.30	32.85	25.56	0.052
14	8.37	32.74	-	25.47					
18	8.35	32.81	-	25.53					
27	7.88	32.97	2.74	25.72					

OBSERVED				COMPUTED	INTERPOLATED				COMPUTED	
Z m	T °C	S ‰	O_2 ml/L	σ_t g/L	Z m	T °C	S ‰	σ_t g/L	ΔD dyn. m	
CGS WM. J. STEWART; October 2, 1950; 1100 GCT; 48°10'N, 125°51'W; wind, 140°, force 2; weather, clear; sea, smooth.										3
0	11.80	32.00	6.30	24.32	0	11.80	32.00	24.32	0.000	
5	11.75	32.03	-	24.35	10	10.77	32.32	24.75	0.034	
9	11.01	32.20	-	24.62	20	9.90	32.67	25.17	0.064	
14	10.11	32.63	-	25.11	30	9.42	32.85	25.39	0.091	
18	9.93	32.65	-	25.15						
27	9.79	32.72	5.08	25.23						
37	7.94	33.37	-	26.03						
CGS WM. J. STEWART; October 2, 1950; 1600 GCT; 47°36'N, 124°45'W; wind, 090°, force 3; weather, clear; sea, moderate.										4
1	13.00	30.17	6.61	22.68	0	13.00	30.17	22.68	0.000	
5	12.98	30.17	-	22.69	10	12.80	31.23	23.54	0.048	
9	12.81	31.00	-	23.36	20	11.39	32.47	24.76	0.085	
14	12.75	31.94	-	24.10	30	8.56	33.10	25.72	0.113	
18	12.15	32.29	5.14	24.48	50	7.21	33.63	26.33	0.153	
27	9.21	32.97	-	25.52						
37	7.45	33.35	-	26.08						
55	7.12	33.68	0.78	26.38						
CGS WM. J. STEWART; October 2, 1950; 2200 GCT; 47°10'N, 124°29'W; wind, 140°, force 4; weather, overcast; sea, moderate.										5
1	12.67	31.24	6.97	23.57	0	12.67	31.24	23.57	0.000	
5	12.73	31.26	-	23.58	10	11.13	32.04	24.47	0.039	
9	12.33	31.71	-	24.00	20	7.28	32.95	25.79	0.067	
14	7.96	32.86	-	25.62	30	7.15	33.28	26.07	0.088	
18	7.42	32.92	3.47	25.75						
23	7.15	33.04	-	25.88						
27	7.15	33.22	-	26.02						
37	7.14	33.44	-	26.19						
46	-	33.71	1.33	-						
CGS WM. J. STEWART; October 3, 1950; 0000 GCT; 46°40'N, 124°20'W; wind, 140°, force 2; weather, overcast; sea, moderate.										6
0	13.89	30.28	6.20	22.59	0	13.89	30.28	22.59	0.000	
9	14.36	32.03	-	23.84	10	14.29	32.04	23.86	0.047	
14	14.01	32.10	-	23.97	20	10.05	32.88	25.31	0.080	
18	10.60	32.77	-	25.13	30	7.97	33.29	25.96	0.104	
23	9.30	33.03	3.58	25.55						
27	8.46	33.19	-	25.81						
37	7.28	33.46	-	26.19						
46	-	33.55	2.79	-						
CGS WM. J. STEWART; October 3, 1950; 0300 GCT; 46°40'N, 124°47'W; wind, 140°, force 5; weather, rain showers; sea, rough.										7
2	15.71	32.05	5.34	23.57	0	15.71	32.05	23.57	0.000	
9	15.69	32.05	-	23.57	10	15.70	32.05	23.57	0.043	
14	15.72	32.05	-	23.57	20	13.86	32.17	24.05	0.084	
23	13.01	32.23	4.96	24.27	30	11.24	32.35	24.69	0.120	
46	8.34	32.54	-	25.32	50	8.02	32.54	25.36	0.179	
69	6.98	32.59	-	25.55	75	6.88	32.75	25.69	0.241	
91	6.73	-	5.34	-	100	6.86	33.31	26.13	0.294	
137	7.20	33.80	-	26.47	150	7.19	33.82	26.49	0.381	
183	7.15	33.86	1.72	26.52	200	7.12	33.85	26.52	0.459	
274	6.88	33.80	1.62	26.51	250	6.99	33.83	26.52	0.537	

OBSERVED				COMPUTED	INTERPOLATED				COMPUTED
Z m	T °C	S ‰	O_2 ml/L	σ_t g/L	Z m	T °C	S ‰	σ_t g/L	ΔD dyn. m
8	CGS WM. J. STEWART; October 3, 1950; 1100 GCT; 46°41'N, 126°10'W; wind, 140°, force 5; weather, drizzle; sea, rough.								
3	15.98	32.09	5.08	23.54	0	15.98	32.09	23.54	0.000
9	16.01	32.09	-	23.53	10	16.02	32.09	23.53	0.044
14	16.04	32.09	-	23.53	20	15.98	32.09	23.54	0.087
23	15.95	32.09	4.80	23.55	30	14.00	32.24	24.08	0.128
46	10.49	32.47	-	24.92	50	9.87	32.47	25.02	0.196
69	7.79	32.56	-	25.41	75	7.56	32.63	25.50	0.265
91	7.12	32.86	4.72	25.74	100	7.15	33.08	25.91	0.322
137	7.16	33.71	-	26.40	150	7.08	33.76	26.45	0.416
183	6.89	33.86	1.59	26.56	200	6.80	33.87	26.58	0.493
274	6.41	33.93	1.83	26.68	250	6.54	33.91	26.64	0.566
457	5.40	34.06	2.17	26.91	300	6.25	33.95	26.71	0.637
640	4.64	34.16	0.40	27.07	400	5.69	34.02	26.84	0.769
823	4.18	34.18	0.44	27.14	500	5.19	34.09	26.95	0.891
					600	4.78	34.14	27.04	1.004
					800	4.22	34.18	27.13	1.214
9	CGS WM. J. STEWART; October 3, 1950; 1800 GCT; 46°42'N, 127°30'W; wind, 270°, force 2; weather, rain showers; sea, smooth.								
0	15.83	31.80	5.17	23.35	0	15.83	31.80	23.35	0.000
9	16.01	32.10	-	23.54	10	15.98	32.10	23.55	0.044
14	15.90	32.10	-	23.56	20	15.85	32.10	23.58	0.088
23	15.83	32.10	5.02	23.58	30	13.99	32.26	24.10	0.129
46	10.59	32.50	-	24.92	50	9.93	32.50	25.04	0.196
69	7.65	32.54	-	25.42	75	7.34	32.54	25.46	0.265
91	6.77	32.61	5.54	25.59	100	6.90	32.84	25.75	0.325
137	7.27	33.53	-	26.25	150	7.33	33.64	26.32	0.425
183	7.34	33.86	2.28	26.50	200	7.13	33.89	26.55	0.506
274	6.37	34.00	1.58	26.74	250	6.59	33.97	26.68	0.579
366	5.76	34.04	-	26.85	300	6.18	34.01	26.77	0.648
549	4.92	34.18	2.00	27.06	400	5.59	34.07	26.89	0.775
732	4.22	34.27	0.28	27.20	500	5.13	34.15	27.01	0.891
914	3.63	34.36	0.25	27.34	600	4.71	34.21	27.10	0.999
1097	3.20	-	-	-	800	3.98	34.30	27.25	1.191
					1000	3.41			
10	CGS WM. J. STEWART; October 4, 1950; 0100 GCT; 46°40'N, 128°37'W; wind, 140°, force 1; weather, partly cloudy; sea, smooth.								
0	16.51	32.09	3.81	23.42	0	16.51	32.09	23.42	0.000
9	16.11	32.10	-	23.52	10	16.12	32.10	23.52	0.044
14	16.16	32.12	-	23.52	20	16.12	32.14	23.55	0.088
23	16.10	32.16	4.61	23.57	30	14.44	32.30	24.03	0.129
46	11.57	32.52	-	24.77	50	11.34	32.54	24.82	0.200
69	9.72	32.61	-	25.16	75	8.72	32.59	25.30	0.273
91	6.72	32.59	5.75	25.58	100	6.65	32.71	25.69	0.335
137	6.44	33.17	-	26.07	150	6.42	33.33	26.20	0.440
183	6.32	33.66	3.70	26.48	200	6.22	33.72	26.54	0.524
274	5.66	33.89	2.37	26.74	250	5.87	33.85	26.68	0.597
366	4.64	33.95	1.36	26.91	300	5.32	33.91	26.80	0.665
549	4.14	34.02	-	27.01	400	4.54	33.96	26.92	0.788
732	3.77	34.19	2.35	27.19	500	4.26	33.99	26.98	0.904
914	3.37	34.34	0.38	27.35	600	4.04	34.07	27.06	1.013
1097	3.19	34.42	0.38	27.43	800	3.59	34.25	27.25	1.208
					1000	3.26	34.39	27.40	1.373

OBSERVED				COMPUTED	INTERPOLATED				COMPUTED
Z m	T °C	S ‰	O_2 ml/L	σ_t g/L	Z m	T °C	S ‰	σ_t g/L	ΔD dyn. m
CGS WM. J. STEWART; October 4, 1950; 0700 GCT; 46°41'N, 129°45'W; wind, 140°, force 3; weather, clear; sea, rough.									11
2	15.82	32.54	4.80	23.92	0	15.82	32.54	23.92	0.000
9	15.70	32.54	-	23.95	10	15.71	32.53	23.94	0.040
14	15.74	32.50	-	23.91	20	15.72	32.48	23.90	0.080
23	15.71	32.48	5.06	23.90	30	13.34	32.51	24.42	0.118
46	9.51	32.56	-	25.15	50	9.14	32.57	25.22	0.181
69	7.83	32.61	-	25.45	75	7.66	32.61	25.47	0.247
91	7.25	32.61	5.90	25.53	100	7.01	32.61	25.56	0.309
137	6.39	32.81	-	25.80	150	6.42	33.02	25.96	0.422
183	6.42	33.46	-	26.31	200	6.34	33.57	26.40	0.515
274	5.87	33.89	2.84	26.71	250	6.04	33.81	26.63	0.593
366	5.05	33.95	1.17	26.86	300	5.61	33.91	26.76	0.663
549	4.15	34.11	0.68	27.09	400	4.84	33.98	26.91	0.789
732	-	34.22	0.51	-	500	4.34	34.07	27.03	0.903
914	4.01	34.16	0.47	27.14	600	4.13	34.16	27.13	1.007
1097	3.38	34.16	0.27	27.20	800	4.05	34.19	27.16	1.205
					1000	3.76	34.16	27.16	1.403
CGS WM. J. STEWART; October 4, 1950; 1500 GCT; 46°42'N, 131°05'W; wind, 250°, force 3; weather, overcast; sea, rough.									12
2	15.92	32.56	5.47	23.91	0	15.92	32.56	23.91	0.000
9	15.94	32.56	-	23.91	10	15.94	32.56	23.91	0.040
14	15.95	32.56	-	23.91	20	15.92	32.56	23.91	0.080
23	15.91	32.56	5.34	23.91	30	13.76	32.56	24.37	0.118
46	10.03	32.56	-	25.07	50	9.46	32.55	25.15	0.182
69	7.51	32.54	-	25.44	75	7.27	32.55	25.48	0.249
91	6.78	32.57	6.05	25.56	100	6.70	32.70	25.67	0.310
137	6.44	33.15	-	26.06	150	6.44	33.28	26.16	0.415
229	6.21	33.80	3.54	26.60	200	6.34	33.67	26.48	0.502
320	5.44	-	-	-	250	6.08			
					300	5.66			
CGS WM. J. STEWART; October 4, 1950; 2200 GCT; 46°40'N, 132°08'W; wind, 220°, force 5; weather, partly cloudy; sea, rough.									13
0	15.60	32.47	5.28	23.91	0	15.60	32.47	23.91	0.000
14	15.54	32.47	-	23.93	10	15.55	32.47	23.93	0.040
23	13.52	32.47	5.28	24.35	20	14.00	32.47	24.26	0.078
46	12.51	32.50	-	24.57	30	13.28	32.48	24.41	0.114
69	7.94	32.56	-	25.39	50	11.47	32.51	24.78	0.182
91	6.76	32.57	6.15	25.56	75	7.56	32.56	25.44	0.254
137	6.13	33.01	-	25.99	100	6.59	32.64	25.64	0.315
183	6.07	33.62	4.02	26.48	150	6.11	33.22	26.16	0.422
274	5.30	33.82	2.60	26.73	200	5.99	33.76	26.60	0.506
					250	5.59	33.77	26.65	0.578
CGS WM. J. STEWART; October 5, 1950; 0700 GCT; 46°41'N, 133°24'W; wind, 260°, force 5; weather, rain showers; sea, rough.									14
5	14.76	32.36	5.36	24.01	0				
14	14.75	32.43	-	24.07	10	14.75	32.41	24.05	
23	14.74	32.41	5.33	24.05	20	14.74	32.41	24.05	
46	10.50	32.56	-	24.99	30	13.26	32.46	24.40	
69	8.05	32.63	-	25.43	50	9.95	32.58	25.09	
91	7.34	32.61	6.05	25.51	75	7.83	32.62	25.45	
137	6.81	32.75	-	25.70	100	7.22	32.64	25.55	
183	6.52	33.51	3.88	26.33	150	6.73	33.00	25.90	
274	5.80	33.86	2.44	26.70	200	6.40	33.69	26.49	
					250	6.01	33.77	26.60	

OBSERVED				COMPUTED	INTERPOLATED				COMPUTED
Z m	T °C	S ‰	O_2 ml/L	σ_t g/L	Z m	T °C	S ‰	σ_t g/L	ΔD dyn. m
15	CGS WM. J. STEWART; October 5, 1950; 2000 GCT; 46°41'N, 135°10'W; wind, 270°, force 4; weather, rain; sea, rough.								
5	14.20	32.43	6.48	24.18	0				
14	14.19	32.38	-	24.15	10	14.20	32.39	24.15	
23	14.16	32.41	5.64	24.18	20	14.17	32.40	24.17	
46	8.34	32.63	-	25.39	30	11.85	32.50	24.70	
69	7.64	32.63	-	25.49	50	8.21	32.63	25.41	
91	7.07	32.65	6.41	25.58	75	7.46	32.63	25.51	
137	6.61	-	-	-	100	6.98			
183	6.20	-	-	-	150	6.49			
274	5.50	-	-	-	200	6.06			
					250	5.67			
16	CGS WM. J. STEWART; October 6, 1950; 0500 GCT; 47°07'N, 136°00'W; wind, 270°, force 5; weather, rain showers; sea, rough.								
5	13.23	32.45	5.70	24.40	0				
14	13.22	32.48	-	24.42	10	13.22	32.47	24.41	
23	13.21	32.48	5.81	24.42	20	13.21	32.48	24.42	
46	8.34	32.65	-	25.40	30	11.34	32.55	24.83	
69	7.12	32.66	-	25.58	50	8.06	32.65	25.44	
91	6.79	32.70	4.56	25.66	75	7.03	32.66	25.60	
137	6.22	33.28	-	26.19	100	6.68	32.82	25.77	
183	5.68	33.75	6.26	26.63	150	6.05	33.42	26.32	
274	5.01	-	-	-	200	5.51			
					250	5.14			
17	CGS WM. J. STEWART; October 6, 1950; 1400 GCT; 48°00'N, 135°20'W; wind, 140°, force 4; weather, drizzle; sea, slight.								
5	13.24	32.38	5.50	24.34	0				
14	13.25	32.36	-	24.32	10	13.25	32.36	24.32	
23	13.26	32.38	5.42	24.34	20	13.26	32.37	24.33	
46	8.67	32.56	-	25.28	30	11.55	32.45	24.72	
69	7.08	32.56	-	25.51	50	8.33	32.56	25.33	
91	6.33	32.56	6.09	25.61	75	6.84	32.56	25.54	
137	6.00	33.19	-	26.15	100	6.26	32.69	25.72	
183	5.71	33.69	4.15	26.58	150	5.92	33.37	26.30	
274	5.16	33.68	2.70	26.63	200	5.60	33.69	26.59	
366	4.71	33.96	1.41	26.91	250	5.29	33.68	26.62	
549	3.89	33.91	1.11	26.95	300	5.03	33.78	26.73	
732	3.49	34.23	0.64	27.25	400	4.53	33.92	26.91	
914	3.15	34.34	0.36	27.37	500	4.07	33.92	26.94	
1097	2.94	34.42	0.29	27.45	600	3.77	34.02	27.05	
					800	3.35	34.27	27.29	
					1000	3.03	34.38	27.41	
18	CGS WM. J. STEWART; October 6, 1950; 2400 GCT; 48°40'N, 134°45'W; wind, 183°, force 4; weather, drizzle; sea, rough.								
5	12.57	32.30	5.61	24.41	0				
14	12.55	32.30	5.58	24.41	10	12.56	32.30	24.41	
23	12.56	32.32	-	24.43	20	12.56	32.31	24.42	
46	7.48	32.56	-	25.46	30	10.60	32.42	24.86	
69	6.28	32.57	6.16	25.62	50	7.24	32.56	25.49	
91	5.51	32.66	-	25.79	75	6.03	32.58	25.66	
137	5.36	33.46	-	26.44	100	5.46	32.85	25.94	
183	5.41	33.84	4.58	26.73	150	5.40	33.59	26.53	
274	4.82	33.89	3.09	26.84	200	5.28	33.84	26.75	
366	4.55	34.02	2.28	26.97	250	4.94	33.87	26.81	
549	3.86	34.13	1.28	27.13	300	4.75	33.93	26.88	
732	3.45	34.25	0.75	27.27	400	4.40	34.04	27.00	
914	3.15	34.33	0.48	27.36	500	4.02	34.10	27.09	
1097	2.90	34.38	0.32	27.42	600	3.73	34.17	27.18	
					800	3.33	34.28	27.30	
					1000	3.03	34.36	27.39	

OBSERVATIONS OF THE USS BURTON ISLAND IN THE BEAUFORT SEA

OBSERVED				COMPUTED	INTERPOLATED				COMPUTED	SIO USNEL UW
Z	T	S	PO_4-P	σ_t	Z	T	S	σ_t	ΔD	
m	°C	‰	μg at/L	g/L	m	°C	‰	g/L	dyn.m	
USS BURTON ISLAND; August 5, 1950; 1900 GCT; 71°07'N, 152°31'W; sounding, 29 m; wind, missing; weather, overcast.										1
0	1.63	24.20		19.39	0	1.63	24.20	19.39	0.00	
5	0.59	28.14		22.58	10	-2.42	30.54	24.59	0.06	
8	-1.58	29.71		23.91						
17	-1.58	32.13		25.87						
USS BURTON ISLAND; August 6, 1950; missing GCT; 71°34'N, 156°05'W; sounding, missing; wind, missing; weather, missing.										2
0	-	-		-	0	(4.57)	(28.33)	(22.76)	(0.00)	
1	4.38	28.74		22.81	10	3.76	30.25	24.03	0.04	
4	3.96	29.67		23.58						
9	3.78	30.19		24.01						
13	3.78	30.32		24.11						
USS BURTON ISLAND; August 11, 1950; 2000 GCT; 71°21'N, 156°44'W; sounding, 29 m; wind, 290°, force 4; weather, overcast.										3
0	6.05	28.96		22.81	0	6.05	28.96	22.81	0.00	
5	6.18	28.94		22.78	10	6.14	28.93	22.78	0.05	
10	6.14	28.93		22.78	20	6.05	29.01	22.85	0.10	
15	6.05	28.98		22.83						
20	6.05	29.01		22.85						
25	6.07	28.99		22.83						
USS BURTON ISLAND; August 11, 1950; missing GCT; 71°27'N, 156°42'W; sounding, 101 m; wind, missing; weather, missing.										4
0	5.18	30.06	0.87a)	23.77	0	5.18	30.06	23.77	0.00	
8	5.22	30.07	0.88	23.78	10	5.41	30.03	23.72	0.04	
16	3.20r	30.08	0.84	23.97	20	5.83	29.98	23.64	0.08	
33	4.97	30.36	0.88	24.03	30	5.31	30.23	23.89	0.12	
49	1.75	31.49	1.14	25.20	50	1.65	31.53	25.24	0.19	
64	1.38	31.79	1.20	25.47						
USS BURTON ISLAND; August 12, 1950; 0100 GCT; 71°34'N, 156°40'W; sounding, missing; wind, 300°, force 2; weather, overcast.										5
0	1.35	27.54		22.07	0	1.35	27.54	22.07	0.00	
10	0.73	28.91		23.20	10	0.73	28.91	23.20	0.05	
16	1.57	29.33		23.49	20	0.92	29.45	23.62	0.10	
25	0.91	29.05r		23.30	30	-0.59	30.67	24.66	0.14	
30	-0.59	30.67		24.66	50	-0.72	32.46	26.11	0.19	
35	-1.28	31.77		25.57	75	-1.06	32.38	26.06	0.24	
50	-0.72	32.46		26.11	100	-1.71	32.75	26.37	0.28	
75	-1.06	32.38		26.06	150	-1.73	32.89	26.49	0.36	
100	-1.71	32.75		26.37						
150	-1.73	32.89		26.49						
USS BURTON ISLAND; August 12, 1950; 0400 GCT; 71°40'N, 156°41'W; sounding, 93 m; wind, 320°, force 4; weather, overcast.										6
0	1.71	27.07		21.68	0	1.71	27.07	21.68	0.00	
10	2.10	27.80		22.24	10	2.10	27.80	22.24	0.06	
20	1.90	30.24		24.20	20	1.90	30.24	24.20	0.10	
25	-0.24	30.94		24.87	30	-1.19	31.41	25.28	0.14	
34	-1.74	31.71		25.53	50	-1.75	32.23	25.95	0.18	
54	-1.75	32.33		26.03	75	-1.73	32.68	26.32	0.23	
74	-1.73	32.66		26.30						
93	-1.77	33.13		26.68						

a) Alternate value, 1.01 μg at/L, not used in interpolation.

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OBSERVED				COMPUTED	INTERPOLATED				COMPUTED
Z	T	S	PO_4-P	σ_t	Z	T	S	σ_t	ΔD
m	°C	‰	µg at/L	g/L	m	°C	‰	g/L	dyn. m
7	USS BURTON ISLAND; August 12, 1950; 0600 GCT; 71°45'N, 156°45'W; sounding, 71 m; wind, 260°, force 4; weather, overcast.								
0	1.74	26.57		21.28	0	1.74	26.57	21.28	0.00
10	1.77	26.57		21.27	10	1.77	26.57	21.27	0.06
20	-0.58	29.90		24.04	20	-0.58	29.90	24.04	0.12
40	-1.70	31.60		25.44	30	-1.33	30.88	24.85	0.15
50	-1.70	32.07		25.82	50	-1.70	32.07	25.82	0.20
60	-1.70	32.33		26.03					
8	USS BURTON ISLAND; August 12, 1950; 0800 GCT; 71°51'N, 156°45'W; sounding, 68 m; wind, 290°, force 4; weather, overcast.								
0	1.73	26.24		21.01	0	1.73	26.24	21.01	0.00
5	-1.70r	26.18r		21.05	10	1.76	26.24	21.01	0.07
10	1.76	26.24		21.01	20	0.05	29.25	23.50	0.12
17	0.40	28.69		23.03	30	-1.19	30.71	24.71	0.16
25	-0.55	30.06		24.17					
33	-1.59	31.03		24.98					
9	USS BURTON ISLAND; August 12, 1950; 1000 GCT; 71°56'N, 156°44'W; sounding, missing; wind, 280°, force 4; weather, overcast.								
0	1.67	26.92		21.56	0	1.67	26.92	21.56	0.00
9	1.69	26.92		21.56	10	1.96	27.22	21.78	0.06
22	1.87	29.79		23.84	20	2.32	29.48	23.56	0.11
29	-1.05	30.47		24.51	30	-1.11	30.59	24.61	0.15
43	-1.64	31.77		25.58	50	-1.68	31.97	25.74	0.21
60	-1.72	32.24		25.96	75	-1.73	32.59	26.24	0.26
82	-1.72	32.74		26.36					
91	-1.67	32.97		26.55					
10	USS BURTON ISLAND; August 12, 1950; 1100 GCT; 71°60'N, 156°44'W; sounding, missing; wind, 310°, force 4; weather, overcast.								
0	-0.02	27.51		22.10	0	-0.02	27.51	22.10	0.00
10	-0.09	27.62		22.19	10	-0.09	27.62	22.19	0.06
22	1.31	30.35		24.32	20	1.60	30.05	24.06	0.10
29	-1.33	30.91		24.87	30	-1.30	30.98	24.93	0.14
37	-1.13	31.41		25.27	50	-1.48	31.85	25.64	0.19
63	-1.69	32.21		25.93	75	-1.80	32.36	26.06	0.25
97	-1.72	32.82		26.43	100	-1.68	32.90	26.49	0.29
135	-0.71	34.13		27.46					
11	USS BURTON ISLAND; August 12, 1950; 1800 GCT; 72°06'N, 156°42'W; sounding, 150 m; wind, 270, force 2; weather, haze.								
0	-1.27	26.46	-	21.28	0	-1.27	26.46	21.28	0.00
15	-1.05	28.69	0.80	23.08	10	-1.36	27.85	22.40	0.06
23	-0.05	30.25	0.90	24.30	20	-0.25	29.73	23.88	0.11
35	-1.38	31.61	1.46	25.44	30	-0.88	31.07	24.99	0.14
85	-1.72	-	-	-	50	-1.60	32.97	26.55	0.19
117	-1.36	34.43	1.81	27.72	75	-1.74	34.40	27.71	0.21
132	-0.33	34.48	1.34	27.72	100	-1.61	34.77	28.01	0.22
12	USS BURTON ISLAND; August 12, 1950; 2200 GCT; 72°12'N, 156°20'W; sounding, missing; wind, 260°, force 4; weather, cloudy.								
0	-0.90	25.68		20.64	0	-0.90	25.68	20.64	0.00
5	-1.30	27.83		22.38	10	-1.35	28.38	22.83	0.06
20	-1.43	29.37		23.63	20	-1.43	29.37	23.63	0.11
70	-1.67	32.24		25.96	30	-1.49	30.14	24.25	0.15
120	-1.74	32.69		26.32	50	-1.59	31.38	25.26	0.21
170	-0.22	34.55		27.77	75	-1.75	32.22	25.94	0.27
225	0.30	34.69		27.86	100	-1.90	32.34	26.04	0.32
					150	-0.71	34.00	27.35	0.39
					200	0.21	34.87	28.01	0.41

OBSERVED				COMPUTED	INTERPOLATED				COMPUTED	SIO USNEL UW
Z	T	S	PO_4-P	σ_t	Z	T	S	σ_t	ΔD	
m	°C	‰	μg at/L	g/L	m	°C	‰	g/L	dyn. m	

USS BURTON ISLAND; August 13, 1950; 0000 GCT; 72°15'N, 156°00'W; sounding, missing; wind, 220°, force 5; weather, overcast. 13

0	-1.12	27.70		22.28	0	-1.12	27.70	22.28	0.00
4	-1.10	27.75		22.32	10	-1.29	27.95	22.48	0.06
8	-1.36	28.08r		22.59	20	-1.13	27.98	22.50	0.11
20	-1.13	27.98		22.50	30	-1.30	29.96	24.11	0.15
40	-1.44	31.52		25.37	50	-1.43	31.70	25.52	0.22
98	-1.48	32.48		26.15	75	-1.44	32.12	25.86	0.28
158	-1.71	-		-	100	-1.51	32.51	26.17	0.32
236	0.00	-		-	150	-1.76	33.20	26.74	0.40
418	0.39u	34.86		27.99	200	-0.67	33.77	27.17	0.46
					250	0.21	34.23	27.50	0.50
					300	0.71	34.56	27.73	0.52
					400	0.58	34.86	27.98	0.55

USS BURTON ISLAND; August 13, 1950; 0500 GCT; 72°19'N, 156°15'W; sounding, missing; wind, 290°, force 4; weather, fog. 14

0	-1.23	28.05		22.56	0	-1.23	28.05	22.56	0.00
10	-1.22	30.53		24.56	10	-1.22	30.53	24.56	0.04
30	-1.36	32.21		25.93	20	-1.32	31.54	25.38	0.07
50	-1.24	32.56		26.21	30	-1.36	32.21	25.93	0.10
75	-1.20	32.79		26.39	50	-1.24	32.56	26.21	0.14
100	-1.69	33.04		26.61	75	-1.20	32.79	26.39	0.18
150	-1.83	34.19		27.54	100	-1.69	33.04	26.61	0.22
222	-0.50	34.43		27.69	150	-1.83	34.19	27.54	0.27
240	-0.34	34.51		27.75	200	-0.79	34.34	27.63	0.29
322	0.31	34.65		27.83	250	-0.23	34.52	27.75	0.31
400	0.44	34.83		27.96	300	0.19	34.61	27.80	0.33
570	0.33	-		-	400	0.44	34.83	27.96	0.35

USS BURTON ISLAND; August 13, 1950; 1800 GCT; 72°22'N, 155°27'W; sounding, missing; wind, 260°, force 4; weather, haze. 15

0	-0.79	28.30	1.56	22.76	0	-0.79	28.30	22.76	0.00
5	-1.23	28.29	0.92	22.75	10	-1.32	28.63	23.03	0.05
15	-1.39	28.99	0.83	23.32	20	-1.39	29.66	23.86	0.09
50	-1.37	32.39	0.83	26.07	30	-1.39	30.82	24.80	0.13
90	-1.29	32.55	1.78	26.20	50	-1.37	32.39	26.07	0.18
179	-1.73	33.05	2.53a)	26.62	75	-1.30	32.49	26.15	0.23
267	-0.13	34.60	1.18	27.81	100	-1.44	32.55	26.20	0.28
440	0.45	34.87	1.01	28.00	150	-1.81	32.77	26.39	0.36
495	0.42	34.87	0.96b)	28.00	200	-1.27	33.51	26.98	0.43
671	0.31	34.88	0.99	28.01	250	-0.37	34.37	27.64	0.47
860	0.06	34.89	1.00	28.03	300	0.06	34.68	27.87	0.48
1132	-0.19	34.90	0.96	28.06	400	0.41	34.84	27.97	0.50
					500	0.42	34.87	28.00	0.52
					600	0.37	34.88	28.01	0.53
					800	0.13	34.89	28.03	0.55
					1000	-0.08	34.90	28.05	0.57

a) Alternate value, 2.65 μg at/L, not used in interpolation.
b) Alternate value, 0.83 μg at/L, not used in interpolation.

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OBSERVED				COMPUTED	INTERPOLATED				COMPUTED
Z	T	S	PO_4-P	σ_t	Z	T	S	σ_t	ΔD
m	°C	‰	µg at/L	g/L	m	°C	‰	g/L	dyn. m

16 USS BURTON ISLAND; August 14, 1950; 0000 GCT; 72°49'N, 155°38'W; sounding, missing; wind, 290°, force 4; weather, haze.

0	-1.42	28.44	-	22.88	0	-1.42	28.44	22.88	0.00
45	-1.06	30.75	0.96	24.74	10	-1.26	29.03	23.35	0.05
89	-1.63	32.16	1.82a)	25.89	20	-1.14	29.58	23.80	0.09
182	-1.11	33.92	1.68	27.30	30	-1.07	30.08	24.20	0.13
272	0.17	34.75	1.13b)	27.92	50	-1.15	30.93	24.89	0.20
372	0.53	34.84	1.10	27.97	75	-1.51	31.75	25.56	0.27
566	0.30	34.87	1.07	28.01	100	-1.61	32.42	26.10	0.32
761	0.08	34.46u	1.20c)	27.69	150	-1.38	33.42	26.91	0.40
920	-0.12	34.87	1.11	28.03	200	-0.78	34.14	27.47	0.44
962	-0.13	33.96r	1.07	27.29	250	-0.06	34.61	27.82	0.46
1045	-0.25	34.92	1.12	28.07	300	0.30	34.78	27.93	0.48
1160	-0.28	34.92	1.06	28.08	400	0.50	34.85	27.98	0.49
1260	-0.32	34.91	1.14	28.07	500	0.38	34.86	27.99	0.51
1472	-0.39	34.93	1.09	28.09	600	0.26	34.86	28.00	0.52
1778	-0.46	34.94	1.10d)	28.10	800	0.01	34.85	28.00	0.54
					1000	-0.21	34.91	28.06	0.56
					1200	-0.30	34.91	28.07	0.57
					1500	-0.40	34.93	28.09	0.58

17 USS BURTON ISLAND; August 14, 1950; 0600 GCT; 73°20'N, 155°28'W; sounding, 3,470 m; wind, 300°, force 4; weather, fog.

0	-1.46	28.17		22.66	0	-1.46	28.17	22.66	0.00
15	-1.41	29.80		23.98	10	-1.42	29.33	23.60	0.05
50	-1.48	31.18		25.10	20	-1.42	30.03	24.16	0.09
100	-1.71	32.23		25.95	30	-1.43	30.46	24.51	0.12
200	-1.38	32.34		26.03	50	-1.48	31.18	25.10	0.19
290	-0.58	34.60		27.83	75	-1.63	31.79	25.59	0.25
595	0.39	34.89		28.02	100	-1.71	32.23	25.95	0.31
792	0.08	34.89		28.03	150	-1.62	31.97	25.74	0.42
998	-0.11	34.93		28.08	200	-1.38	32.34	26.03	0.52
1198	-0.27	34.91		28.07	250	-0.91	33.72	27.13	0.59
1500	-0.39	34.93		28.09	300	-0.52	34.62	27.85	0.62
2000	-0.41	34.94		28.10	400	-0.03	34.75	27.93	0.65
2500	-0.41	34.96		28.11	500	0.28	34.84	27.98	0.66
					600	0.38	34.89	28.02	0.68
					800	0.07	34.89	28.03	0.69
					1000	-0.11	34.93	28.08	0.71
					1200	-0.27	34.91	28.07	0.72
					1500	-0.39	34.93	28.09	0.73
					1800	-0.40	34.93	28.09	0.73
					2000	-0.41	34.94	28.10	0.73
					2500	-0.41	34.96	28.11	0.73

a) Alternate value, 1.71 µg at/L, not used in interpolation.
b) Alternate value, 1.50 µg at/L, not used in interpolation.
c) Alternate value, 1.05 µg at/L, not used in interpolation.
d) Alternate value, 1.21 µg at/L, not used in interpolation.

OBSERVED				COMPUTED	INTERPOLATED				COMPUTED
Z	T	S	PO_4-P	σ_t	Z	T	S	σ_t	ΔD
m	°C	‰	μg at/L	g/L	m	°C	‰	g/L	dyn. m

USS BURTON ISLAND; August 14, 1950; 1700 GCT; 73°47'N, 155°10'W; sounding, missing; wind, 280°, force 4; weather, fog. 18

0	-1.54	28.96	1.59	23.30	0	-1.54	28.96	23.30	0.00
15	-1.54	28.99	0.86	23.32	10	-1.54	28.95	23.29	0.05
50	-1.52	30.17	0.83a)	24.28	20	-1.55	29.16	23.46	0.09
100	-1.03	31.86	1.51	25.63	30	-1.56	29.50	23.74	0.13
200	-1.38	33.43	1.74	26.91	50	-1.52	30.17	24.28	0.21
400	0.43	34.84	1.00	27.97	75	-1.22	31.09	25.02	0.30
600	0.40	34.82	1.01	27.96	100	-1.03	31.86	25.63	0.36
800	0.14u	34.43u	1.02	27.66	150	-1.31	32.72	26.34	0.46
1000	-0.09	34.90	1.00	28.05	200	-1.38	33.43	26.91	0.53
1200	-0.21	34.92	0.98	28.07	250	-0.76	33.92	27.29	0.58
1500	-0.36	34.92	0.96	28.08	300	-0.25	34.31	27.58	0.61
2000	-0.40	34.97	1.06	28.12	400	0.43	34.84	27.97	0.64
2500	-0.42	34.97	1.02	28.12	500	0.43	34.82	27.96	0.66
					600	0.40	34.82	27.96	0.68
					800	0.11	34.87	28.02	0.70
					1000	-0.09	34.90	28.05	0.72
					1200	-0.21	34.92	28.07	0.73
					1500	-0.36	34.92	28.08	0.74
					1800	-0.39	34.96	28.11	0.75
					2000	-0.40	34.97	28.12	0.74
					2500	-0.42	34.97	28.12	0.73

USS BURTON ISLAND; August 15, 1950; 1200 GCT; 73°28'N, 157°28'W; sounding, 2,960 m; wind, 250°, force 3; weather, snow. 19

0	-1.52	28.80		23.17	0	-1.52	28.80	23.17	0.00
15	-1.53	28.88		23.24	10	-1.53	28.80	23.17	0.05
50	-1.43	31.10		25.03	20	-1.51	29.27	23.55	0.09
100	-1.42	32.30		26.00	30	-1.48	29.97	24.12	0.13
200	-1.22	33.67		27.10	50	-1.43	31.10	25.03	0.20
400	0.50	34.82		27.95	75	-1.43	31.74	25.55	0.27
600	0.38	34.86		27.99	100	-1.42	32.30	26.00	0.32
800	0.10	34.89		28.03	150	-1.38	33.05	26.61	0.41
1000	-0.14	34.90		28.05	200	-1.22	33.67	27.10	0.47
1003	-0.18	34.92		28.07	250	-0.62	34.06	27.40	0.51
1204	-0.29	34.92		28.08	300	-0.13	34.38	27.63	0.54
1507	-0.39	34.91		28.07	400	0.50	34.82	27.95	0.57
2010	-0.44	34.96		28.12	500	0.46	34.84	27.97	0.59
2513	-0.41	34.95		28.11	600	0.38	34.86	27.99	0.60
					800	0.10	34.89	28.03	0.62
					1000	-0.14	34.90	28.05	0.64
					1200	-0.29	34.92	28.08	0.65
					1500	-0.39	34.91	28.07	0.66
					1800	-0.43	34.95	28.11	0.66
					2000	-0.44	34.96	28.12	0.66
					2500	-0.41	34.95	28.11	0.66

a) Alternate value, 1.04 μg at/L, not used in interpolation.

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OBSERVED				COMPUTED	INTERPOLATED				COMPUTED
Z	T	S	PO_4-P	σ_t	Z	T	S	σ_t	ΔD
m	°C	‰	µg at/L	g/L	m	°C	‰	g/L	dyn. m
20	USS BURTON ISLAND; August 15, 1950; 1900 GCT; 73°17'N, 158°36'W; sounding, missing; wind, 035°, force 3; weather, fog.								
0	-1.05	27.45	1.03a)	22.07	0	-1.05	27.45	22.07	0.00
15	-0.80	29.22	0.87	23.50	10	-0.84	28.67	23.05	0.05
49	-1.61	31.79	1.48	25.59	20	-0.96	29.71	23.90	0.10
98	-1.72	32.35	1.95	26.05	30	-1.23	30.57	24.60	0.13
147	-1.68	32.76	2.12	26.38	50	-1.61	31.80	25.60	0.19
192	-0.88	34.01	1.44	27.37	75	-1.69	32.11	25.85	0.25
289	0.22	34.74	1.08	27.91	100	-1.74	32.35	26.05	0.30
585	0.37u	34.53u	1.04	27.73	150	-1.62	32.86	26.46	0.39
783	0.06	34.89	1.04	28.03	200	-0.78	34.08	27.42	0.44
833	0.00	34.90	1.02	28.05	250	-0.18	34.47	27.71	0.47
1026	-0.12	34.90	1.03	28.05	300	0.23	34.74	27.90	0.48
1220	-0.21	34.92	1.06	28.07	400	0.25	34.78	27.94	0.50
1519	-0.36	34.73u	1.08	27.93	500	0.25	34.82	27.97	0.52
1920	-0.43	34.94	1.03	28.10	600	0.21	34.85	27.99	0.54
					800	0.04	34.89	28.04	0.56
					1000	-0.11	34.90	28.05	0.57
					1200	-0.20	34.92	28.07	0.58
					1500	-0.32	34.94	28.09	0.59
					1800	-0.40	34.94	28.10	0.60
21	USS BURTON ISLAND; August 15, 1950; 2300 GCT; 73°14'N, 159°18'W; sounding, missing; wind, 360°, force 3; weather, haze.								
0	-0.45	24.36		19.58	0	-0.45	24.36	19.58	0.00
15	-1.10	26.49		21.30	10	-0.91	25.77	20.72	0.08
50	-1.64	31.73		25.54	20	-1.20	27.48	22.10	0.14
100	-1.71	32.39		26.08	30	-1.38	29.22	23.51	0.19
150	-1.70	32.89		26.48	50	-1.64	31.73	25.54	0.26
200	-0.43	34.47		27.72	75	-1.69	32.08	25.83	0.32
400	0.52	34.52		27.71	100	-1.71	32.39	26.08	0.37
600	0.32	34.89		28.02	150	-1.70	32.89	26.48	0.46
796	0.09	34.88		28.03	200	-0.43	34.47	27.72	0.50
993	-0.07	34.90		28.05	250	-0.08	34.45	27.69	0.52
					300	0.19	34.46	27.68	0.54
					400	0.52	34.52	27.71	0.58
					500	0.42	34.75	27.90	0.62
					600	0.32	34.89	28.02	0.63
					800	0.09	34.88	28.03	0.65
22	USS BURTON ISLAND; August 16, 1950; 0200 GCT; 73°11'N, 160°10'W; sounding, missing; wind, 010°, force 3; weather, overcast.								
0	-0.18	24.83		19.95	0	-0.18	24.83	19.95	0.00
15	-1.00	29.32		23.58	10	-0.77	28.06	22.56	0.06
50	-1.48	31.66		25.48	20	-1.08	29.74	23.92	0.11
100	-1.72	32.49		26.16	30	-1.24	30.50	24.54	0.15
150	-0.99	33.99		27.36	50	-1.48	31.66	25.48	0.21
200	-0.26	34.55		27.78	75	-1.72	31.99	25.76	0.27
250	0.16	34.73		27.90	100	-1.72	32.49	26.16	0.32
					150	-0.99	33.99	27.36	0.38
					200	-0.26	34.55	27.78	0.41
					250	0.16	34.73	27.90	0.42

a) Alternate value, 1.18 µg at/L, not used in interpolation.

OBSERVED				COMPUTED	INTERPOLATED				COMPUTED	SIO USNEL UW
Z	T	S	PO_4-P	σ_t	Z	T	S	σ_t	ΔD	
m	°C	‰	μg at/L	g/L	m	°C	‰	g/L	dyn. m	

USS BURTON ISLAND; August 16, 1950; 0500 GCT; 73°06'N, 161°08'W; sounding, missing; wind, 340°, force 2; weather, partly cloudy. 23

0	0.02	25.65	20.60	0	0.02	25.65	20.60	0.00
15	-0.62	28.22	22.69	10	-0.42	27.43	22.05	0.06
50	-1.68	31.89	25.67	20	-0.82	28.89	23.23	0.12
100	-1.70	32.99	26.57	30	-1.18	30.09	24.21	0.16
140	-0.41	34.35	27.62	50	-1.68	31.89	25.67	0.22
				75	-1.92	32.36	26.06	0.27
				100	-1.70	32.99	26.57	0.32

USS BURTON ISLAND; August 16, 1950; 0800 GCT; 73°01'N, 162°21'W; sounding, missing; wind, 010°, force 1; weather, partly cloudy. 24

0	-0.47	28.01	22.51	0	-0.47	28.01	22.51	0.00
10	-0.92	28.96	23.29	10	-0.92	28.96	23.29	0.05
25	0.00	31.48	25.29	20	-0.01	30.76	24.71	0.09
40	-1.75	32.93	26.52	30	-0.78	32.08	25.80	0.12
55	-1.77	33.32	26.84	50	-1.96	33.31	26.83	0.15
70	-1.76	33.38	26.88					

USS BURTON ISLAND; August 16, 1950; 1100 GCT; 73°01'N, 163°37'W; sounding, 73 m; wind, 010°, force 1; weather, partly cloudy. 25

0	-0.68	28.31	22.76	0	-0.68	28.31	22.76	0.00
10	-1.29	29.37	23.63	10	-1.29	29.37	23.63	0.05
25	-1.02	30.63	24.64	20	-1.00	30.12	24.23	0.09
40	-1.70	32.71	26.34	30	-1.31	31.51	25.36	0.12
55	-1.80	33.07	26.63	50	-1.83	33.14	26.69	0.16
70	-1.76	33.16	26.71					

USS BURTON ISLAND; August 16, 1950; 1400 GCT; 73°21'N, 163°40'W; sounding, 91 m; wind, 020°, force 2; weather, partly cloudy. 26

0	-1.12	26.57	21.36	0	-1.12	26.57	21.36	0.00
5	-1.03	26.91	21.64	10	-1.27	28.25	22.72	0.06
15	-1.46	29.44	23.69	20	-1.57	30.56	24.60	0.10
30	-1.73	32.10	25.85	30	-1.73	32.10	25.85	0.13
50	-1.75	32.38	26.07	50	-1.75	32.38	26.07	0.17
75	-1.71	32.40	26.09	75	-1.71	32.40	26.09	0.22

USS BURTON ISLAND; August 16, 1950; 1700 GCT; 73°35'N, 163°40'W; sounding, 165 m; wind, missing; weather, partly cloudy. 27

0	-1.35	27.82	22.38	0	-1.35	27.82	22.38	0.00
17	-1.54	28.77	23.15	10	-1.50	28.44	22.88	0.05
25	-1.51	29.04	23.36	20	-1.53	28.86	23.22	0.10
65	-1.65	31.90	25.68	30	-1.53	29.48	23.72	0.14
122	-1.65	-	-	50	-1.61	31.00	24.95	0.22
125	-1.31	33.49	26.96	75	-2.54	32.16	25.90	0.28
160	-0.32	34.46	27.71	100	-3.10	32.82	26.44	0.33
				150	-0.04	34.18	27.47	0.38

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OBSERVED				COMPUTED	INTERPOLATED				COMPUTED
Z	T	S	PO_4-P	σ_t	Z	T	S	σ_t	ΔD
m	°C	‰	μg at/L	g/L	m	°C	‰	g/L	dyn. m
28	USS BURTON ISLAND; August 16, 1950; 2300 GCT; 73°39'N, 160°40'W; sounding, missing; wind, 150°, force 1; weather, partly cloudy.								
0	-0.80	28.50	0.78	22.92	0	-0.80	28.50	22.92	0.00
15	-1.31	28.81	0.88	23.18	10	-1.17	28.65	23.04	0.05
50	-1.43	31.34	1.22	25.22	20	-1.32	29.26	23.54	0.10
100	-1.71	32.37	1.88	26.06	30	-1.35	30.08	24.20	0.14
200	-0.96	34.12	1.38	27.46	50	-1.43	31.34	25.22	0.20
400	0.48	34.87	0.98	27.99	75	-1.62	31.87	25.66	0.26
600	0.35	34.88	0.96	28.01	100	-1.71	32.37	26.06	0.32
800	0.19	34.88	0.98	28.02	150	-1.33	33.36	26.86	0.40
1000	-0.06	34.89	1.00	28.04	200	-0.96	34.12	27.46	0.44
					250	-0.45	34.38	27.65	0.47
					300	-0.04	34.59	27.80	0.49
					400	0.48	34.87	27.99	0.51
					500	0.42	34.88	28.01	0.52
					600	0.35	34.88	28.01	0.53
					800	0.19	34.88	28.02	0.55
					1000	-0.06	34.89	28.04	0.57
29	USS BURTON ISLAND; August 17, 1950; 0400 GCT; 73°23'N, 161°25'W; sounding, missing; wind, 180°, force 4; weather, partly cloudy.								
0	0.79	24.71		19.83	0	0.79	24.71	19.83	0.00
14	-1.26	28.10		22.60	10	-0.80	27.25	21.91	0.07
45	-1.42	31.36		25.24	20	-1.28	28.93	23.27	0.12
73	-1.65	32.13		25.87	30	-1.33	30.10	24.22	0.16
113	-1.75	32.65		26.29	50	-1.47	31.52	25.37	0.23
159	-1.24	33.72		27.14	75	-1.67	32.15	25.88	0.29
204	-0.07	34.58		27.79	100	-1.77	32.44	26.12	0.34
					150	-1.39	33.53	27.00	0.41
					200	-0.20	34.51	27.74	0.44
30	USS BURTON ISLAND; August 17, 1950; 0800 GCT; 72°57'N, 162°08'W; sounding, 29 m; wind, 120°, force 6; weather, overcast.								
0	-1.04	28.77		23.14	0	-1.04	28.77	23.14	0.00
10	-1.07	29.98		24.12	10	-1.07	29.98	24.12	0.04
25	-1.60	31.18		25.10	20	-1.47	30.82	24.80	0.08
45	-1.61	32.26		25.97	30	-1.59	31.56	25.41	0.11
65	-1.73	32.19		25.92	50	-1.66	32.15	25.88	0.15
85	-1.60	33.13		26.68	75	-1.70	32.53	26.19	0.20
31	USS BURTON ISLAND; August 17, 1950; 2300 GCT; 71°20'N, 156°44'W; sounding, 29 m; wind, 110°, force 6; weather, overcast.								
0	4.91	29.56		23.41	0	4.91	29.56	23.41	0.00
7	2.90	31.46		25.10	10	2.68	31.50	25.15	0.04
15	2.41	31.56		25.21	20	2.28	31.59	25.25	0.06
22	2.27	31.60		25.26					
29	1.67	31.91		25.55					

OBSERVED				COMPUTED	INTERPOLATED				COMPUTED
Z	T	S	PO_4-P	σ_t	Z	T	S	σ_t	ΔD
m	°C	‰	µg at/L	g/L	m	°C	‰	g/L	dyn.m

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USS BURTON ISLAND; August 18, 1950; 2300 GCT; 70°21'N, 141°33'W; sounding, 62 m; wind, 300°, force 3; weather, fog. 32

0	1.22	16.19	0.39	13.00	0	1.22	16.19	13.00	0.00
8	0.69	24.28	0.71	19.49	10	0.10	26.12	20.98	0.11
18	-1.55	31.27	1.12	25.17	20	-1.57	31.28	25.18	0.16
33	-1.64	31.45	1.16	25.32	30	-1.63	31.39	25.27	0.18
48	-1.65	31.87	1.42	25.66	50	-1.64	31.90	25.68	0.23
63	-1.57	32.01	1.62	25.77					

USS BURTON ISLAND; August 19, 1950; 0700 GCT; 70°19'N, 138°24'W; sounding, missing; wind, 280°, force 4; weather, drizzle. 33

0	4.14	24.24		19.27	0	4.14	24.24	19.27	0.00
5	3.93	24.63		19.60	10	4.77	26.28	20.83	0.08
10	4.77	26.28		20.83	20	0.09	29.91	24.03	0.13
25	-1.47	31.15		25.07	30	-1.53	31.28	25.18	0.16
49	-1.69	31.73		25.54	50	1.69	31.74	25.55	0.22
98	-1.64	32.41		26.09	75	-1.68	32.09	25.84	0.27
187	-1.31	33.64		27.08	100	-1.64	32.44	26.12	0.32
					150	-1.48	33.13	26.67	0.41

USS BURTON ISLAND; August 19, 1950; 1300 GCT; 70°36'N, 135°50'W; sounding, 73 m; wind, 320°, force 7; weather, fog. 34

0	5.31	27.96	0.80	22.10	0	5.31	27.96	22.10	0.00
8	5.31	27.98	0.78	22.12	10	3.92	28.83	22.92	0.05
18	0.13	31.11	0.92a)	24.99	20	-0.03	31.20	25.07	0.09
28	-0.67	31.50	1.04	25.33	30	-0.87	31.53	25.36	0.12
38	-1.43	31.71	1.14	25.52	50	-1.63	32.17	25.90	0.17
48	-1.61	32.11	1.38	25.85					
65	-1.64	32.45	1.62	26.13					

USS BURTON ISLAND; August 19, 1950; 1800 GCT; 71°03'N, 133°05'W; sounding, 137 m; wind, 310°, force 4; weather, fog. 35

0	4.07	28.22		22.43	0	4.07	28.22	22.43	0.00
7	3.50	29.81		23.73	10	3.51	29.95	23.84	0.05
15	3.03	30.26		24.13	20	1.45	30.72	24.61	0.08
25	0.20	31.11		24.99	30	-0.18	31.36	25.20	0.12
49	-1.24	32.08		25.82	50	-1.26	32.10	25.83	0.16
78	-1.65	32.45		26.13	75	-1.62	32.42	26.10	0.22
127	-1.63	32.57		26.22	100	-1.75	32.58	26.23	0.26

USS BURTON ISLAND; August 19, 1950; 2300 GCT; 71°31'N, 130°02'W; sounding, 201 m; wind, 010°, force 3; weather, fog. 36

0	1.50	28.75	0.86	23.03	0	1.50	28.75	23.03	0.00
15	1.81	30.13	0.90	24.11	10	2.03	29.71	23.76	0.04
30	-0.83	31.15	0.96	25.06	20	0.76	30.51	24.48	0.08
60	-1.57	32.16	1.45	25.89	30	-0.83	31.15	25.06	0.12
100	-1.68	32.58	1.52	26.23	50	-1.39	31.89	25.67	0.17
150	-1.62	32.89	1.73	26.48	75	-1.63	32.34	26.04	0.22
190	-1.47	33.12	-	26.67	100	-1.68	32.58	26.23	0.27
					150	-1.62	32.89	26.48	0.35

a) Alternate value, 1.03 µg at/L, not used in interpolation.

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OBSERVED				COMPUTED	INTERPOLATED				COMPUTED
Z	T	S	PO_4-P	σ_t	Z	T	S	σ_t	ΔD
m	°C	‰	μg at/L	g/L	m	°C	‰	g/L	dyn. m
37	USS BURTON ISLAND; August 20, 1950; 0100 GCT; 71°38'N, 129°06'W; sounding, 298 m; wind, 030°, force 4; weather, fog.								
0	3.22	29.81		23.76	0	3.22	29.81	23.76	0.00
15	3.45	30.07		23.95	10	3.53	29.98	23.87	0.04
25	2.80	-		-	20	3.20	30.13	24.01	0.08
50	-1.38	30.63		24.65	30	1.80	30.28	24.23	0.12
125	-1.60	32.75		26.37	50	-1.38	30.63	24.65	0.19
200	-1.16	33.78		27.19	75	-1.53	31.46	25.32	0.26
280	0.12	34.70		27.88	100	-1.60	32.16	25.89	0.32
					150	-1.54	33.11	26.66	0.41
					200	-1.16	33.78	27.19	0.47
					250	-0.46	34.38	27.65	0.50
38	USS BURTON ISLAND; August 20, 1950; 0500 GCT; 71°49'N, 127°55'W; sounding, 420 m; wind, 320°, force 3; weather, cloudy.								
0	1.84	29.36		23.50	0	1.84	29.36	23.50	0.00
15	3.45	30.40		24.21	10	3.16	30.08	23.98	0.04
50	-1.27	31.79		25.58	20	2.55	30.64	24.47	0.08
100	-1.51	32.65		26.29	30	0.97	31.08	24.92	0.11
150	-1.50	33.12		26.67	50	-1.27	31.79	25.58	0.17
200	-1.83	34.05		27.43	75	-1.42	32.27	25.98	0.22
280	0.10	34.78		27.94	100	-1.51	32.65	26.29	0.27
360	0.30	34.87		28.01	150	-1.50	33.12	26.67	0.35
					200	-1.83	34.05	27.43	0.40
					250	-0.42	34.58	27.81	0.42
					300	0.31	34.86	28.00	0.43
39	USS BURTON ISLAND; August 20, 1950; 0600 GCT; 71°57'N, 126°58'W; sounding, 420 m; wind, 320°, force 3; weather, overcast.								
0	2.38	30.08		24.04	0	2.38	30.08	24.04	0.00
15	2.22	30.61		24.47	10	2.37	30.43	24.32	0.04
50	-1.40	31.80		25.60	20	1.47	30.80	24.67	0.07
80	-1.52	32.50		26.16	30	0.21	31.17	25.03	0.10
120	-1.60	32.91		26.50	50	-1.40	31.80	25.60	0.16
200	-0.80	34.07		27.41	75	-1.50	32.41	26.09	0.21
280	0.08	34.71		27.89	100	-1.60	32.69	26.32	0.26
360	0.15	34.78		27.94	150	-1.31	33.41	26.90	0.33
					200	-0.80	34.07	27.41	0.37
					250	-0.16	34.54	27.76	0.40
					300	0.17	34.78	27.94	0.41
40	USS BURTON ISLAND; August 20, 1950; 0900 GCT; 72°02'N, 126°17'W; sounding, 31 m; wind, 300°, force 3; weather, cloudy.								
0	1.28	25.81		20.69	0	1.28	25.81	20.69	0.00
10	1.94	30.47		24.38	10	1.94	30.47	24.38	0.05
20	0.62	31.34		25.15	20	0.62	31.34	25.15	0.08
28	-1.28	32.45		26.12					

OBSERVED				COMPUTED	INTERPOLATED				COMPUTED
Z	T	S	PO_4-P	σ_t	Z	T	S	σ_t	ΔD
m	°C	‰	μg at/L	g/L	m	°C	‰	g/L	dyn. m

USS BURTON ISLAND; August 20, 1950; 1200 GCT; 71°56'N, 125°42'W; sounding, 71 m; wind, 320°, force 3; weather, overcast. 41

0	1.48	26.02	20.85	0	1.48	26.02	20.85	0.00
5	1.82	30.11	24.10	10	1.99	30.79	34.63	0.05
10	1.99	30.79	24.63	20	-0.33	31.50	25.32	0.08
20	-0.33	31.50	25.32	30	-0.97	31.88	25.65	0.11
40	-1.41	32.18	25.90	50	-1.64	32.39	26.08	0.15
65	-1.58	32.56	26.21					

USS BURTON ISLAND; August 20, 1950; 1400 GCT; 71°54'N, 126°32'W; sounding, 375 m; wind, 320°, force 5; weather, overcast. 42

0	1.24	25.35	20.32	0	1.24	25.35	20.32	0.00
14	2.18	30.63	24.49	10	2.17	29.58	23.65	0.06
29	-0.40	31.35	25.17	20	1.40	30.94	24.79	0.10
73	-1.53	32.43	26.11	30	0.34	31.38	25.20	0.12
121	-1.58	32.98	26.56	50	-0.75	31.93	25.68	0.18
170	-1.17	33.58	27.03	75	-1.54	32.45	26.12	0.23
242	-0.22	34.52	27.75	100	-1.61	32.73	26.35	0.27
362	0.17	34.80	27.96	150	-1.36	33.33	26.83	0.35
				200	-0.71	34.04	27.38	0.39
				250	-0.15	34.59	27.80	0.42
				300	0.15	34.86	28.01	0.43

USS BURTON ISLAND; August 21, 1950; 1800 GCT; 72°18'N, 126°33'W; sounding, 34 m; wind, 060°, force 3; weather, overcast. 44

0	0.80	31.28	0.91	25.09	0	0.80	31.28	25.09	0.00
5	-0.30	29.72	0.98	23.89	10	0.31	30.02	24.11	0.03
10	0.31	30.02	1.00	24.11	20	1.03	31.10	24.94	0.07
18	1.12	30.91	0.98	24.78					
28	-0.47	31.73	1.12	25.51					

USS BURTON ISLAND; August 21, 1950; 2100 GCT; 72°18'N, 127°41'W; sounding, 223 m; wind, 060°, force 4; weather, overcast. 45

0	-0.36	29.22	23.49	0	-0.36	29.22	23.49	0.00
10	-0.20	29.38	23.61	10	-0.20	29.38	23.61	0.04
20	1.61	31.01	24.83	20	1.61	31.01	24.83	0.08
30	-0.17	31.49	25.31	30	-0.17	31.49	25.31	0.11
90	-1.62	32.74	26.36	50	-0.85	31.96	25.71	0.16
150	-1.27	33.47	26.94	75	-1.43	32.48	26.15	0.21
200	-0.81	34.02	27.37	100	-1.58	32.87	26.47	0.25
				150	-1.27	33.47	26.94	0.32
				200	-0.81	34.02	27.37	0.37

BURTON ISLAND; August 22, 1950; 0100 GCT; 72°25'N, 128°45'W; sounding, 333 m; wind, 100°, force 4; weather, overcast. 46

0	0.20	28.91	23.22	0	0.20	28.91	23.22	0.00
15	2.07	29.63	23.70	10	1.95	29.27	23.42	0.05
30	-0.55	31.42	25.26	20	1.04	30.34	24.33	0.09
60	-1.52	31.94	25.71	30	-0.55	31.42	25.26	0.12
100	-1.60	32.69	26.32	50	-1.28	31.76	25.56	0.17
149	-1.39	33.39	26.88	75	-1.58	32.24	25.96	0.22
199	-0.60	34.28	27.57	100	-1.60	32.69	26.32	0.27
299	0.16	34.79	27.95	150	-1.37	33.41	26.90	0.34
				200	-0.59	34.29	27.58	0.38
				250	-0.08	34.75	27.93	0.40

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OBSERVED				COMPUTED	INTERPOLATED				COMPUTED
Z	T	S	PO_4-P	σ_t	Z	T	S	σ_t	ΔD
m	°C	‰	µg at/L	g/L	m	°C	‰	g/L	dyn. m
47	USS BURTON ISLAND; August 22, 1950; 0400 GCT; 72°04'N, 130°01'W; sounding, 365 m; wind, 120°, force 4; weather, overcast.								
0	1.32	29.34		23.51	0	1.32	29.34	23.51	0.00
15	2.65	-		-	10	2.51	30.06	24.01	0.04
29	1.41	31.19		24.99	20	2.25	30.70	24.54	0.08
39	0.30	-		-	30	1.29	31.22	25.02	0.11
98	-1.52	32.62		26.26	50	-0.19	31.73	25.50	0.16
148	-1.55	33.03		26.59	75	-1.04	32.25	25.95	0.22
247	-0.15	34.57		27.79	100	-1.53	32.63	26.27	0.27
346	0.30	34.89		28.02	150	-1.51	33.07	26.63	0.35
					200	-0.70	33.99	27.34	0.40
					250	-0.12	34.60	27.81	0.43
					300	0.21	34.89	28.03	0.44
48	USS BURTON ISLAND; August 22, 1950; 1500 GCT; 71°45'N, 131°29'W; sounding, 878 m; wind, 080°, force 6; weather, partly cloudy.								
0	-0.03	28.45	0.94	22.86	0	-0.03	28.45	22.86	0.00
15	0.82	-	0.94	-	10	0.64	29.37	23.57	0.05
30	0.85	30.74	1.01	24.66	20	0.91	30.13	24.17	0.09
60	-1.10	31.63	1.08	25.45	30	0.85	30.74	24.66	0.12
100	-1.53	32.38	1.72	26.07	50	-0.61	31.36	25.22	0.18
150	-1.09	33.76	1.68	27.17	75	-1.34	31.87	25.65	0.25
200	-0.40	34.45	1.24	27.70	100	-1.53	32.38	26.07	0.30
300	0.22	34.78	1.16	27.94	150	-1.09	33.76	27.17	0.37
400	0.45	34.87	1.09	28.00	200	-0.40	34.45	27.70	0.40
600	0.28	-	1.09	-	250	-0.04	34.65	27.85	0.42
850	-0.01	34.90	1.04	28.05	300	0.22	34.78	27.94	0.43
					400	0.45	34.87	28.00	0.45
					500	0.37	34.93	28.05	0.46
					600	0.28	34.96	28.08	0.46
					800	0.05	34.93	28.07	0.47
49	USS BURTON ISLAND; August 22, 1950; 2000 GCT; 71°24'N, 132°55'W; sounding, 1,280 m; wind, 080°, force 6; weather, partly cloudy.								
0	1.01	28.22		22.63	0	1.01	28.22	22.63	0.00
20	1.54	30.21		24.19	10	1.50	29.31	23.48	0.05
50	-0.97	31.72		25.52	20	1.54	30.21	24.19	0.09
100	-1.67	32.51		26.18	30	0.53	30.80	24.72	0.12
185	-1.38	33.40		26.89	50	-0.97	31.72	25.52	0.18
200	-1.10	33.82		27.22	75	-1.40	32.14	25.87	0.24
280	-0.03	34.66		27.85	100	-1.67	32.51	26.18	0.29
569	0.32	-		-	150	-1.77	32.73	26.36	0.38
768	0.21	34.88		28.02	200	-1.10	33.82	27.22	0.44
965	-0.05	34.90		28.05	250	-0.18	34.65	27.85	0.47
1218	-0.28	34.92		28.08					

OBSERVED				COMPUTED	INTERPOLATED				COMPUTED	SIO USNEL UW
Z	T	S	PO_4-P	σ_t	Z	T	S	σ_t	ΔD	
m	°C	‰	μg at/L	g/L	m	°C	‰	g/L	dyn. m	

USS BURTON ISLAND; August 23, 1950; 0300 GCT; 71°50'N, 134°26'W; sounding, 1,865 m; wind, 100°, force 5; weather, overcast. 50

0	-0.02	27.58		22.16	0	-0.02	27.58	22.16	0.00
15	1.54	29.97		24.00	10	1.48	29.33	23.49	0.05
30	-1.01	30.99		24.93	20	0.52	30.36	24.37	0.09
60	-1.58	31.60		25.44	30	-1.01	30.99	24.93	0.12
100	-1.59	32.54		26.20	50	-1.44	31.39	25.26	0.18
150	-1.48	33.13		26.67	75	-1.59	32.00	25.76	0.24
200	-0.80	34.20		27.52	100	-1.59	32.54	26.20	0.29
293	0.10	34.77		27.94	150	-1.48	33.13	26.67	0.37
391	0.38	34.84		27.98	200	-0.80	34.20	27.52	0.42
587	0.29	34.89		28.02	250	-0.24	34.57	27.79	0.44
786	0.12	34.93		28.06	300	0.13	34.78	27.94	0.46
988	-0.07	34.94		28.08	400	0.38	34.84	27.98	0.47
1387	-0.32	34.95		28.10	500	0.34	34.87	28.00	0.48
1785	-0.43	34.96		28.12	600	0.28	34.89	28.02	0.50
					800	0.11	34.93	28.06	0.51
					1000	-0.08	34.94	28.08	0.52
					1200	-0.22	34.95	28.10	0.53
					1500	-0.37	34.95	28.10	0.53

USS BURTON ISLAND; August 23, 1950; 1100 GCT; 71°38'N, 137°16'W; sounding, 2,050 m; wind, 100°, force 6; weather, partly cloudy. 51

0	2.16	24.00	19.21	0	2.16	24.00	19.21	0.00
5	2.06	24.06	19.26	10	-0.38	29.20	23.47	0.06
10	-0.38	29.20	23.47	20	-1.00	30.29	24.37	0.10
20	-1.00	30.29	24.37	30	-1.24	30.66	24.67	0.14
49	-1.55	31.29	25.19	50	-1.55	31.30	25.19	0.20
98	-1.52	32.39	26.08	75	-1.51	31.72	25.53	0.26
113	-1.55	32.97	26.55	100	-1.53	32.47	26.14	0.32
196	-0.95	34.08	27.43	150	-1.51	33.44	26.93	0.39
238	0.07	34.72	27.90	200	-0.84	34.15	27.48	0.44
378	0.44u	34.02u	27.31	250	0.10	34.73	27.90	0.46
528	0.34	34.89	28.02	300	0.19	34.77	27.93	0.47
690	0.16	34.90	28.04	400	0.31	34.84	27.98	0.48
864	0.02	34.90	28.04	500	0.35	34.88	28.01	0.50
1192	-0.26	34.92	28.08	600	0.25	34.90	28.03	0.51
1540	-0.40	34.94	28.10	800	0.07	34.90	28.04	0.52
				1000	-0.11	34.91	28.06	0.54
				1200	-0.27	34.92	28.08	0.55
				1500	-0.39	34.94	28.10	0.56

USS BURTON ISLAND; August 23, 1950; 1900 GCT; 72°03'N, 137°32'W; sounding, 2,360 m; wind, 100°, force 12; weather, clear. 52

0	-1.15	25.85	0.78	20.78	0	-1.15	25.85	20.78	0.00
15	-1.31	27.54	0.88	22.15	10	-1.26	26.90	21.63	0.07
35	-1.42	30.89	0.97	24.86	20	-1.34	28.56	22.97	0.12
75	-1.51	31.89	1.52	25.67	30	-1.40	30.23	24.33	0.16
150	-1.51	33.14	2.03	26.68	50	-1.46	31.29	25.18	0.23
300	0.17	34.71	1.13	27.88	75	-1.51	31.89	25.67	0.29
378	0.40	34.80	1.12	27.94	100	-1.57	32.34	26.04	0.34
572	0.37	34.87	1.08	28.00	150	-1.51	33.14	26.68	0.43
765	0.12	34.88	1.09	28.02	200	-0.77	33.87	27.25	0.48
1059	-0.18	34.88	1.06	28.04	250	-0.21	34.39	27.65	0.52
1457	-0.35	34.90	1.11	28.06	300	0.17	34.71	27.88	0.53
1960	-1.47u	-	-	-	400	0.41	34.81	27.95	0.55
1980	-0.45	34.95	1.14	28.11	500	0.41	34.85	27.98	0.57
					600	0.33	34.87	28.00	0.58
					800	0.08	34.88	28.03	0.60
					1000	-0.13	34.88	28.04	0.62
					1200	-0.17	34.89	28.05	0.63
					1500	-0.41	34.90	28.07	0.65
					1800	-1.00	34.93	28.12	0.65

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OBSERVED				COMPUTED	INTERPOLATED				COMPUTED
Z	T	S	PO_4-P	σ_t	Z	T	S	σ_t	ΔD
m	°C	‰	μg at/L	g/L	m	°C	‰	g/L	dyn.m
53	USS BURTON ISLAND; August 24, 1950; 2100 GCT; 71°57'N, 141°00'W; sounding, 2,760 m; wind, 090°, force 6; weather, overcast.								
0	-0.98	23.24	0.66	18.68	0	-0.98	23.24	18.68	0.00
10	-0.98	32.28	0.64	18.71	10	-0.98	23.28	18.71	0.09
20	-1.38	26.89	0.79	21.63	20	-1.38	26.89	21.63	0.17
50	-1.36	30.94	0.90	24.90	30	-1.36	28.51	22.93	0.22
100	-1.50	32.29	1.72	25.99	50	-1.36	30.94	24.90	0.30
200	-0.97	34.02	1.40	27.38	75	-1.46	31.66	25.48	0.37
300	-0.90	34.71	1.08	27.93	100	-1.50	32.29	25.99	0.43
350	0.35	34.81	1.00	27.95	150	-1.18	33.29	26.80	0.51
529	0.41	34.87	0.99	28.00	200	-0.97	34.02	27.38	0.56
711	0.18	34.87	0.94	28.01	250	-1.34	34.45	27.74	0.58
895	0.00	34.88	1.00	28.03	300	-0.90	34.71	27.93	0.60
1362	-0.36	34.93	1.03	28.09	400	0.40	34.83	27.97	0.61
1865	-0.42	34.93	1.06	28.09	500	0.42	34.86	27.99	0.63
2365	-0.42	34.97	1.06	28.12	600	0.31	34.87	28.00	0.64
					800	0.09	34.87	28.02	0.66
					1000	-0.11	34.90	28.05	0.68
					1200	-0.27	34.92	28.08	0.69
					1500	-0.38	34.93	28.09	0.70
					1800	-0.42	34.93	28.09	0.70
					2000	-0.43	34.94	28.10	0.70
54	USS BURTON ISLAND; August 24, 1950; 1200 GCT; 71°48'N, 142°52'W; sounding, 3,100 m; wind, 090°, force 6; weather, cloudy.								
0	-1.20	24.30		19.53	0	-1.20	24.30	19.53	0.00
10	-1.37	25.67		20.64	10	-1.37	25.67	20.64	0.08
20	-1.42	26.61		21.40	20	-1.42	26.61	21.40	0.14
50	-1.37	30.73		24.73	30	-1.39	28.25	22.72	0.20
100	-1.55	32.23		25.95	50	-1.37	30.73	24.73	0.29
200	-1.03	33.99		27.36	75	-1.50	31.53	25.38	0.36
300	-0.24	34.77		27.95	100	-1.55	32.23	25.95	0.42
880	0.01	34.87		28.02	150	-1.32	33.23	26.75	0.50
1344	-0.38	34.95		28.11	200	-1.03	33.99	27.36	0.55
1844	-0.42	34.92		28.08	250	-0.61	34.41	27.68	0.58
2344	-0.42	34.96		28.12	300	-0.24	34.77	27.95	0.59
					400	-0.14	34.79	27.96	0.61
					500	-0.06	34.80	27.97	0.62
					600	-0.01	34.82	27.98	0.64
					800	0.02	34.86	28.01	0.66
					1000	-0.12	34.90	28.05	0.68
					1200	-0.30	34.94	28.09	0.69
					1500	-0.40	34.93	28.09	0.69
					1800	-0.42	34.92	28.08	0.70
					2000	-0.42	34.92	28.08	0.70

OBSERVED				COMPUTED	INTERPOLATED				COMPUTED
Z	T	S	PO_4-P	σ_t	Z	T	S	σ_t	ΔD
m	°C	‰	μg at/L	g/L	m	°C	‰	g/L	dyn.m

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USS BURTON ISLAND; August 27, 1950; 1900 GCT; 72°14'N, 145°01'W; sounding, 3,360 m; wind, 150°, force 3; weather, fog. 55

0	-0.86	20.58	0.66	16.53	0	-0.86	20.58	16.53	0.00
10	-1.02	20.70	0.58	16.63	10	-1.02	20.70	16.63	0.11
20	-1.49	28.13	0.86	22.63	20	-1.49	28.13	22.63	0.19
50	-1.43	30.91	1.02	24.88	30	-1.46	29.22	23.51	0.24
100	-1.50	32.35	1.86	26.04	50	-1.43	30.91	24.88	0.31
200	-0.91	34.11	1.42	27.45	75	-1.50	31.68	25.50	0.38
300	0.18	34.72	1.16	27.89	100	-1.50	32.35	26.04	0.44
393	0.42	34.85	1.03	27.98	150	-1.27	33.37	26.86	0.52
589	0.32	34.88	0.97	28.01	200	-0.91	34.11	27.45	0.56
785	0.07	34.89	0.99	28.03	250	-0.26	34.48	27.72	0.59
979	-0.08	34.91	0.98	28.06	300	0.18	34.72	27.89	0.60
1371	-0.35	34.91	1.00	28.07	400	0.42	34.85	27.98	0.62
1895	-0.43	34.95	1.08	28.11	500	0.38	34.87	28.00	0.64
2395	-0.42	34.95	1.10	28.11	600	0.30	34.88	28.01	0.65
					800	0.06	34.89	28.03	0.67
					1000	-0.10	34.91	28.06	0.68
					1200	-0.25	34.91	28.07	0.69
					1500	-0.38	34.92	28.08	0.70
					1800	-0.42	34.95	28.11	0.71
					2000	-0.43	34.95	28.11	0.71

USS BURTON ISLAND; August 28, 1950; 0200 GCT; 71°45'N, 145°04'W; sounding, 3,450 m; wind, 140°, force 4; weather, partly cloudy. 56

0	0.07	26.64		21.40	0	0.07	26.64	21.40	0.00
15	-0.57	28.38		22.81	10	-0.33	27.75	22.30	0.06
29	-1.36	30.40		24.46	20	-0.91	29.24	23.52	0.11
58	-1.43	30.81		24.80	30	-1.36	30.41	24.47	0.15
96	-1.56	32.13		25.87	50	-1.41	30.65	24.67	0.22
196	-1.22	33.78		27.19	75	-1.51	31.45	25.31	0.29
296	0.15	34.72		27.89	100	-1.57	32.21	25.93	0.35
396	0.46	34.83		27.96	150	-1.50	33.11	26.66	0.44
595	0.31	34.88		28.01	200	-1.14	33.83	27.23	0.49
796	0.08	34.88		28.03	250	-0.35	34.39	27.65	0.52
994	-0.11	34.91		28.06	300	0.17	34.73	27.90	0.54
1392	-0.36	34.91		28.07	400	0.46	34.83	27.96	0.56
1888	-0.43	34.94		28.10	500	0.39	34.86	27.99	0.57
2380	-0.44	34.94		28.10	600	0.30	34.88	28.01	0.58
					800	0.08	34.88	28.03	0.61
					1000	-0.12	34.91	28.06	0.62
					1200	-0.26	34.91	28.07	0.63
					1500	-0.38	34.92	28.08	0.64
					1800	-0.42	34.94	28.10	0.65
					2000	-0.44	34.94	28.10	0.65

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OBSERVED				COMPUTED	INTERPOLATED				COMPUTED
Z	T	S	PO_4-P	σ_t	Z	T	S	σ_t	ΔD
m	°C	‰	μg at/L	g/L	m	°C	‰	g/L	dyn. m

57 USS BURTON ISLAND; August 28, 1950; 0700 GCT; 71°15'N, 145°16'W; sounding, 2,580 m; wind, 150°, force 4; weather, cloudy.

0	0.89	27.74	22.25	0	0.89	27.74	22.25	0.00
15	0.02	29.10	23.38	10	0.22	28.66	23.02	0.05
30	-0.07	30.36	24.39	20	0.05	29.58	23.76	0.10
58	-1.57	31.35	25.23	30	-0.07	30.36	24.39	0.14
96	-1.59	32.26	25.97	50	-1.27	31.09	25.02	0.20
193	-1.44	32.32	26.02	75	-1.58	31.82	25.62	0.27
290	-1.54	33.39	26.89	100	-1.58	32.24	25.96	0.32
377	0.44	34.82	27.96	150	-1.48	32.17	25.90	0.43
566	0.39	34.88	28.01	200	-1.53	32.38	26.07	0.53
758	0.13	34.89	28.03	250	-1.79	32.88	26.48	0.61
953	-0.04	34.89	28.04	300	-1.25	33.60	27.05	0.68
1350	-0.35	34.92	28.08	400	0.44	34.83	27.97	0.74
1826	-0.43	34.95	28.11	500	0.43	34.86	27.99	0.75
2300	-0.45	34.94	28.10	600	0.34	34.88	28.01	0.76
				800	0.09	34.89	28.03	0.78
				1000	-0.09	34.89	28.04	0.80
				1200	-0.26	34.91	28.07	0.81
				1500	-0.38	34.93	28.09	0.82
				1800	-0.43	34.95	28.11	0.82
				2000	-0.44	34.95	28.11	0.82

58 USS BURTON ISLAND; August 28, 1950; 1100 GCT; 71°01'N, 145°21'W; sounding, 1,829 m; wind, 180°, force 5; weather, cloudy.

0	-0.15	30.18	24.25	0	-0.15	30.18	24.25	0.00
15	-1.41	30.61	24.63	10	-1.12	30.47	24.51	0.04
30	-1.54	31.04	24.98	20	-1.46	30.76	24.76	0.07
50	-1.58	31.53	25.38	30	-1.54	31.04	24.98	0.10
90	-1.58	32.25	25.96	50	-1.58	31.53	25.38	0.16
150	-1.56	33.03	26.60	75	-1.58	32.00	25.76	0.22
225	0.36	34.48	27.69	100	-1.67	32.36	26.05	0.27
300	0.25	34.77	27.93	150	-1.56	33.03	26.60	0.35
400	0.47	34.88	28.00	200	-0.05	34.13	27.43	0.40
600	0.31	34.89	28.02	250	0.30	34.60	27.79	0.43
800	0.11	34.89	28.03	300	0.25	34.77	27.93	0.44
1000	-0.15	34.92	28.07	400	0.47	34.88	28.00	0.46
1300	-0.28	34.88u	28.12	500	0.40	34.89	28.02	0.47
1700	-0.46	34.96	28.12	600	0.31	34.89	28.02	0.48
				800	0.11	34.89	28.03	0.50
				1000	-0.15	34.92	28.07	0.51
				1200	-0.24	34.97	28.11	0.52
				1500	-0.37	34.98	28.13	0.52

59 USS BURTON ISLAND; August 28, 1950; 1500 GCT; 70°58'N, 145°28'W; sounding, missing; wind, 180°, force 5; weather, cloudy.

0	0.10r	29.80	-	0	1.07	29.80	23.89	0.00
15	-0.63	30.50	-	10	-0.15	30.29	24.34	0.04
30	-1.56	31.00	24.95	20	-1.03	30.69	24.69	0.07
50	-1.60	31.36	25.24	30	-1.56	31.00	24.95	0.10
100	-1.56	32.31	26.01	50	-1.60	31.36	25.24	0.16
150	-1.56	32.93	26.51	75	-1.58	31.88	25.66	0.22
200	-0.76	34.23	27.54	100	-1.56	32.31	26.01	0.28
300	0.26	34.75	27.91	150	-1.56	32.93	26.51	0.37
500	0.45	34.87	28.00	200	-0.76	34.23	27.54	0.42
700	0.07	34.88	-	250	-0.17	34.53	27.76	0.44
				300	0.26	34.75	27.91	0.45
				400	0.43	34.82	27.96	0.47
				500	0.45	34.87	28.00	0.49
				600	0.33	34.89	28.02	0.50

OBSERVED				COMPUTED	INTERPOLATED				COMPUTED
Z	T	S	PO_4-P	σ_t	Z	T	S	σ_t	ΔD
m	°C	‰	μg at/L	g/L	m	°C	‰	g/L	dyn. m

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USS BURTON ISLAND; August 28, 1950; 1600 GCT; 70°54'N, 145°36'W; sounding, 440 m; wind, 160, force 6; weather, cloudy. 60

0	0.24	29.79	23.92	0	0.24	29.79	23.92	0.00
15	-0.32	30.17	24.25	10	-0.21	30.04	24.14	0.04
30	-0.23	30.57	24.57	20	-0.18	30.22	24.29	0.08
50	-1.63	32.22	25.94	30	-0.23	30.57	24.57	0.11
100	-1.59	31.22	25.13	50	-1.63	32.22	25.94	0.17
150	-1.53	33.07	26.63	75	-1.61	31.36	25.24	0.22
200	-0.70	34.32	27.61	100	-1.59	31.22	25.13	0.30
300	0.38	34.84	27.98	150	-1.53	33.07	26.63	0.40
400	0.48	34.87	27.99	200	-0.70	34.32	27.61	0.45
				250	-0.04	34.64	27.84	0.47
				300	0.38	34.84	27.98	0.48
				400	0.48	34.87	27.99	0.49

USS BURTON ISLAND; August 28, 1950; 1900 GCT; 70°50'N, 145°48'W; sounding, 187 m; wind, 160°, force 4; weather, cloudy. 61

0	0.55	29.16	23.40	0	0.55	29.16	23.40	0.00
15	-1.04	30.62	24.63	10	-0.63	30.24	24.32	0.04
30	-1.58	31.08	25.02	20	-1.27	30.77	24.75	0.08
50	-1.62	31.74	25.55	30	-1.58	31.08	25.02	0.10
100	-1.57	32.52	26.18	50	-1.62	31.74	25.55	0.16
165	-1.03	32.98	26.54	75	-1.63	32.18	25.91	0.22
				100	-1.57	32.52	26.18	0.26
				150	-1.20	32.93	26.50	0.35

USS BURTON ISLAND; August 28, 1950; 2000 GCT; 70°46'N, 145°56'W; sounding, 58 m; wind, 190°, force 4; weather, cloudy. 62

0	-0.87	31.65	25.46	0	-0.87	31.65	25.46	0.00
10	-1.11	31.80	25.59	10	-1.11	31.80	25.59	0.02
20	-1.09	31.85	25.63	20	-1.09	31.85	25.63	0.05
35	-1.10	31.97	25.73	30	-1.05	31.88	25.65	0.07
50	-1.54	32.50	26.17	50	-1.54	32.50	26.17	0.11

USS BURTON ISLAND; August 28, 1950; 2200 GCT; 70°40'N, 146°10'W; sounding, 44 m; wind, 100°, force 4; weather, partly cloudy. 63

0	-0.85	32.03	25.77	0	-0.85	32.03	25.77	0.00
10	-0.90	32.07	25.80	10	-0.90	32.07	25.80	0.02
20	-1.23	32.12	25.85	20	-1.23	32.12	25.85	0.04
35	-1.46	32.61	26.25	30	-1.42	32.39	26.07	0.06

USS BURTON ISLAND; August 29, 1950; 0100 GCT; 70°26'N, 146°39'W; sounding, 27 m; wind, 160°, force 1; weather, partly cloudy. 64

0	-0.26	31.59	25.39	0	-0.26	31.59	25.39	0.00
7	-0.37	31.69	25.48	10	-0.45	31.72	25.50	0.02
15	-0.57	31.77	25.55	20	-0.66	31.83	25.60	0.05
23	-0.71	31.86	25.62					

USS BURTON ISLAND; August 29, 1950; 1300 GCT; 71°06'N, 151°34'W; sounding, 19 m; wind, 040°, force 3; weather, partly cloudy. 65

0	0.24	30.71	24.66	0	0.24	30.71	24.66	0.00
7	-1.12	31.03	24.97	10	-1.32	31.11	25.04	0.03
15	-1.15	31.16	25.07					

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OBSERVED				COMPUTED	INTERPOLATED				COMPUTED
Z	T	S	PO_4-P	σ_t	Z	T	S	σ_t	ΔD
m	°C	‰	μg at/L	g/L	m	°C	‰	g/L	dyn. m

66 USS BURTON ISLAND; August 29, 1950; 1500 GCT; 71°18'N, 151°30'W; sounding, missing; wind, 030°, force 4; weather, partly cloudy.

0	-0.24	31.41	25.25	0	-0.24	31.41	25.25	0.00
7	-0.95	31.49	25.33	10	-0.96	31.51	25.35	0.03
15	-0.98	31.55	25.38	20	-1.01	31.57	25.40	0.05
30	-1.09	31.72	25.52	30	-1.09	31.72	25.52	0.08
50	-1.29	32.53	26.18	50	-1.29	32.53	26.18	0.12

67 USS BURTON ISLAND; August 29, 1950; 1700 GCT; 71°23'N, 151°28'W; sounding, missing; wind, 040°, force 4; weather, cloudy.

0	-0.54	31.34	25.20	0	-0.54	31.34	25.20	0.00
10	-1.29	31.65	25.47	10	-1.29	31.65	25.47	0.03
19	-1.16	31.67	25.48	20	-1.16	31.67	25.48	0.05
38	-1.15	31.79	25.58	30	-1.13	31.73	25.53	0.08
76	-1.61	32.23	25.95	50	-1.39	31.88	25.66	0.12
113	-1.18	33.11	26.65	75	-1.61	32.21	25.93	0.18
158	-0.51	34.22	27.52	100	-1.34	32.80	26.40	0.23
				150	-0.64	34.02	27.37	0.28

68 USS BURTON ISLAND; August 29, 1950; 1800 GCT; 71°28'N, 151°27'W; sounding, 410 m; wind, 040° force 3; weather, fog.

0	-0.26	30.00	24.11	0	-0.26	30.00	24.11	0.00
10	-1.45	30.78	24.77	10	-1.45	30.78	24.77	0.04
34	-1.04	31.50	25.34	20	-1.20	31.11	25.03	0.07
68	-1.51	32.06	25.81	30	-1.07	31.40	25.26	0.09
136	-1.55	33.01	26.58	50	-1.30	31.77	25.57	0.14
204	-0.47	34.44	27.70	75	-1.57	32.14	25.87	0.20
308	0.40	34.86	27.99	100	-1.67	32.45	26.13	0.25
				150	-1.29	33.38	26.87	0.33
				200	-0.52	34.38	27.65	0.37
				250	0.03	34.89	28.04	0.38
				300	0.37	34.90	28.03	0.39

69 USS BURTON ISLAND; August 29, 1950; 2000 GCT; 71°36'N, 151°25'W; sounding, 914 m; wind, 040°, force 4; weather, fog.

0	0.08	30.16	24.23	0	0.08	30.16	24.23	0.00
11	-0.54	30.60	24.60	10	-0.49	30.57	24.58	0.04
36	-1.20	30.91	24.87	20	-0.82	30.67	24.67	0.07
73	-1.43	31.97	25.73	30	-1.08	30.81	24.79	0.10
149	-1.44	33.28	26.79	50	-1.30	31.34	25.22	0.16
308	0.27	34.79	27.94	75	-1.44	32.01	25.77	0.22
473	0.40	34.84	27.98	100	-1.49	32.48	26.15	0.27
650	0.13	34.88	28.02	150	-1.42	33.29	26.80	0.35
831	-0.06	34.48u	27.71	200	-0.72	33.92	27.29	0.40
				250	-0.17	34.41	27.66	0.43
				300	0.22	34.75	27.91	0.45
				400	0.39	34.82	27.96	0.47
				500	0.35	34.87	28.00	0.48
				600	0.20	34.88	28.02	0.49
				800	-0.03			

OBSERVED				COMPUTED	INTERPOLATED				COMPUTED
Z	T	S	PO_4-P	σ_t	Z	T	S	σ_t	ΔD
m	°C	‰	μg at/L	g/L	m	°C	‰	g/L	dyn. m

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USS BURTON ISLAND; August 29, 1950; 2200 GCT; 71°40'N, 151°23'W; sounding, 1,793 m; wind, 040°, force 4; weather, fog. 70

0	0.60	29.33	23.54	0	0.60	29.33	23.54	0.00
12	0.41	29.47	23.66	10	0.45	29.42	23.62	0.04
24	0.09	29.98	24.08	20	0.20	29.81	23.94	0.08
67	-1.18	-	-	30	-0.13	30.13	24.21	0.12
146	-1.55	32.81	26.42	50	-0.77	30.63	24.63	0.19
242	-0.06	34.61	27.82	75	-1.28	31.24	25.14	0.27
252	-0.16	34.60	27.81	100	-1.51	31.81	25.61	0.34
387	0.43	34.85	27.98	150	-1.40	32.95	26.53	0.43
529	0.43	34.87	28.00	200	-0.17	34.25	27.53	0.48
640	0.38	34.90	28.02	250	-0.14	34.60	27.81	0.50
745	0.21	34.87	28.01	300	0.12	34.71	27.89	0.52
960	0.00	34.92	28.06	400	0.43	34.85	27.98	0.54
1190	-0.26	34.91	28.07	500	0.44	34.86	27.99	0.55
				600	0.41	34.90	28.02	0.56
				800	0.16	34.89	28.03	0.58
				1000	-0.04	34.92	28.06	0.60

USS BURTON ISLAND; August 30, 1950; 0300 GCT; 71°51'N, 151°20'W; sounding, 2,380 m; wind, 080°, force 4; weather, overcast. 71

0	0.65	28.04	0.78	22.50	0	0.65	28.04	22.50	0.00
20	-0.41	29.33	0.88	23.58	10	-0.73	28.31	22.76	0.05
30	1.62	31.09	1.02	24.89	20	-0.41	29.33	23.58	0.10
50	2.16	31.69	1.08	25.34	30	1.62	31.09	24.89	0.14
75	-0.07	31.89	1.34	25.62	50	2.16	31.69	25.34	0.19
120	-1.62	32.49	1.90	26.16	75	-0.07	31.89	25.62	0.26
200	-1.77	34.10	1.50	27.47	100	-1.06	32.20	25.91	0.31
300	0.24	34.79	1.06	27.94	150	-1.86	33.20	26.74	0.40
391	0.48	34.85	1.05	27.98	200	-1.77	34.10	27.47	0.44
588	0.34	34.87	1.00	28.00	250	-0.54	34.53	27.77	0.47
784	0.09	34.88	1.01	28.03	300	0.24	34.79	27.94	0.48
982	-0.05	34.88	1.04	28.03	400	0.48	34.85	27.98	0.50
1180	-0.26	34.89	1.06	28.05	500	0.42	34.86	27.99	0.51
1545	-0.38	34.91	1.08	28.07	600	0.32	34.87	28.00	0.52
2080	-0.45	34.92	1.12	28.08	800	0.08	34.88	28.03	0.54
					1000	-0.07	34.88	28.03	0.56
					1200	-0.27	34.89	28.05	0.58
					1500	-0.37	34.91	28.07	0.59
					1800	-0.43	34.92	28.08	0.60
					2000	-0.45	34.92	28.08	0.60

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OBSERVED				COMPUTED	INTERPOLATED				COMPUTED
Z	T	S	PO_4-P	σ_t	Z	T	S	σ_t	ΔD
m	°C	‰	μg at/L	g/L	m	°C	‰	g/L	dyn. m

72 USS BURTON ISLAND; August 30, 1950; 0900 GCT; 72°11'N, 151°12'W; sounding, 3,290 m; wind, 100°, force 4; weather, fog.

0	0.65	26.87	21.56	0	0.65	26.87	21.56	0.00
15	0.28	28.74	23.08	10	0.41	28.22	22.66	0.06
30	-0.14	29.64	23.82	20	0.19	29.02	23.31	0.11
50	-1.43	31.11	25.04	30	-0.14	29.64	23.82	0.15
70	-0.73u	31.82	25.59	50	-1.43	31.11	25.04	0.22
100	-1.46	32.25	25.96	75	-0.89	31.90	25.66	0.28
150	-1.60	32.74	26.36	100	-1.46	32.25	25.96	0.34
200	-1.16	33.86	27.26	150	-1.60	32.74	26.36	0.43
300	0.15	34.71	27.88	200	-1.16	33.86	27.26	0.50
400	0.51	34.84	27.97	250	-0.39	34.38	27.65	0.53
600	0.32	34.87	28.00	300	0.15	34.71	27.88	0.54
800	0.07	34.88	28.03	400	0.51	34.84	27.97	0.56
1000	-0.12	34.89	28.04	500	0.42	34.86	27.99	0.58
1400	-0.36	34.93	28.09	600	0.32	34.87	28.00	0.59
1800	-0.42	34.96	28.12	800	0.07	34.88	28.03	0.61
2300	-0.45	34.96	28.12	1000	-0.12	34.89	28.04	0.63
				1200	-0.26	34.91	28.07	0.64
				1500	-0.38	34.94	28.10	0.65
				1800	-0.42	34.96	28.12	0.65
				2000	-0.44	34.97	28.12	0.64

73 USS BURTON ISLAND; August 30, 1950; 1200 GCT; 72°20'N, 151°18'W; sounding, 3,515 m; wind, 060°, force 2; weather, cloudy.

0	-0.34	26.41	21.22	0	-0.34	26.41	21.22	0.00
20	-0.89	27.62	22.21	10	-0.60	26.77	21.52	0.06
35	-1.38	29.81	23.99	20	-0.89	27.62	22.21	0.12
100	-1.51	32.28	25.99	30	-1.24	29.15	23.45	0.17
200	-1.23	32.84	26.43	50	-1.43	30.53	24.57	0.25
300	0.11	34.70	27.88	75	-1.49	31.53	25.38	0.33
400	0.47	34.85	27.98	100	-1.51	32.28	25.99	0.38
500	0.50	34.88	28.00	150	-1.50	32.40	26.08	0.48
700	0.19	34.87	28.01	200	-1.23	32.84	26.43	0.57
1000	-0.10	34.97u	28.11	250	-0.44	33.98	27.33	0.63
1300	-0.31	34.91	28.07	300	0.11	34.70	27.88	0.65
1600	-0.42	34.93	28.09	400	0.47	34.85	27.98	0.67
2000	-0.42	34.95	28.11	500	0.50	34.88	28.00	0.69
2400	-0.44	34.96	28.12	600	0.33	34.87	28.00	0.70
				800	0.08	34.92	28.06	0.72
				1000	-0.10	34.97	28.11	0.73
				1200	-0.25	34.92	28.07	0.73
				1500	-0.39	34.92	28.08	0.74
				1800	-0.42	34.94	28.10	0.74
				2000	-0.42	34.95	28.11	0.74

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